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Linnea Westerlind
Western Washington University

klipsun

- undetected danger
- seeds of peace
- chocolate necessities

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letter from the editor

I have heard it said that being a journalist enables you to talk with people you'd otherwise never meet, go places you'd otherwise never travel and learn stories you'd otherwise never hear. We hope Klipsun offers the same opportunities to you as readers.

Throughout the quarter we have encouraged our writers to research and write stories with one question always in mind, "Why will people care about this?"

Each story in this issue has a tie to the students of Western and the surrounding communities.

The Issues section addresses the increasing use of drugs to facilitate rape. *Invisible Intruder* highlights a Western woman's life-changing encounter with one such drug. We hope as you read this story you will remember everyone is at risk. This issue exists, even in our small community and it is our responsibility to educate and protect each other.

Email the staff at:
klipsun@faith.journ.wwu.edu
or call 650-3737 with any feedback.

Sara Hixson, managing editor

Klipsun *is a Lummi word meaning beautiful sunset.*
Klipsun *is a student publication of Western Washington University distributed twice per quarter.*
Klipsun *is available free for Western students and the community.*

Tiffany Campbell is a senior majoring in environmental journalism and english. She believes Orca whales should be preserved not just for economic reasons, but also for the environmental health of Puget Sound.

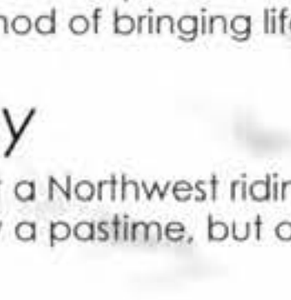
Katy Mullen dug deep into the vision behind Project PEACE. After getting her hands dirty in the garden, the senior public relations major decided that organic farming might just be the "seed of peace."

Erin Crumpacker, a senior public relations and communications major, believes medical waste is an important issue in Whatcom County. She hopes her story will help the community come to its own conclusion on the topic of medical waste.

Jennifer Collins, a journalism major, is grateful to those who shared stories about drug-facilitated sexual assault for this article. "Rape affects us all - from the woman serving coffee at Starbucks to the person sitting next to us in class." She hopes this story will soften hearts and open eyes.

northwest

Kim Lincoln, a senior public relations major, found midwifery to be rich in history and something most people don't realize still exists. By writing this story she hopes to raise awareness of the profession and encourage expectant parents to consider all the options before choosing where to have their baby.



C. Nicki Krom, a junior public relations major, believes that everyone deserves an occasional small treat to offer a vacation from the everyday stresses of life. Chocolate is always her vacation and she would not miss the opportunity to taste and learn about chocolate from a real chocolatier.

Celia Ross, a biology major and journalism minor, was pleased to write a story where the words "smiles" and "therapy" could be used in the same sentence. "Theraputic riding has the advantage of being an activity that can benefit all ages and a wide range of disabilities, and can still be fun."

Christine Callan hopes to one day run a marathon herself. The public relations major was encouraged by following Michael and Andrea Hartley through their first marathon experince.

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Troubled Waters

As the number of Orcas decrease in the San Juan Islands, the number of whale watching boats increase. **Tiffany Campbell** describes the effect tourism and the environment have had on these incredible creatures.
Photos by Chris Fuller.

At first, no one is sure they've actually seen one — just a black flash in the distant water. Everyone in the boat strains further over the rails with an audible, collective gasp, trying to catch another glimpse. A few minutes later, the huge black-and-white whale obliges, slipping in and out of the water like an oiled wheel. This is Orcinus Orca, the killer whale.

These Northwest whales breach out of the gray-blue waters to power an entire industry of whale watching. These creatures that thrill so many people, however, face an onslaught of problems. Activist groups, researchers and community members are calling for their protection. Such protection would impose consequences, not just for human interaction with the whales but also for business in the San Juan Islands.

"This island is whale-powered," said Bob Van Leuven, owner of Western Prince Cruises, on a recent early-season whale watching trip. He has taken people on wildlife cruises in the islands longer than anyone, since 1986. He sits naturally as he navigates his boat, scanning ahead to spot wildlife. He is relaxed but alert, casually pointing out porpoises and eagles — the supporting cast of the show — an untrained eye could easily miss.

"We have a tourism-based economy," Van Leuven said. "Whale watchers are staying at the hotels, eating in the restaurants, buying the T-shirts." He added that whale watching is a big draw to San Juan Island and Friday Harbor.

The Whale Museum, a non-profit educational group in Friday Harbor, estimates whale watching in the San Juan Islands is a $10 million industry. More than 500,000 people whale watch on commercial boats in the waters of Washington and British Columbia each year, and another 3,000 — 8,000 whale watch from private boats.

"There's no way to track how much is spun off into the other businesses," Van Leuven said. "If whale watching was suddenly made illegal, I would say 50 percent of the businesses would collapse."

This is a big day for Van Leuven's self-described "mom-and-pop" operation — the season's first whale sighting, and one whale is sporting a new baby.

Barb Jensen, a naturalist who has been working for Western Prince Cruises for six years, equates this first sighting with meeting old friends. Leaning over the rails at the bow of the boat, she describes how the young Orca keeps up with its mother along the current created by her body.

All that is usually seen of the whales are their upright dorsal fins and portions of their sleek black-and-white bodies as they surface for air. Occasionally, the Orcas heave themselves out of the water briefly to breach, their bodies slamming back into the ocean with hard smacks. It is thought they do this to stun their prey for an easier meal.

"I'm confident that they are resident to this area, and if they disappear we are not just going to magically have other whales showing up to be residents of Puget Sound."

Roughly 700 killer whales live in British Columbia and Washington State waters. Concerns that the Northwest whales may be declining, or eventually be wiped out, have raised speculation about their future.

In May, the Center for Biological Diversity, based in Tucson, Ariz., filed a petition to have these local whales, the southern resident pod of Puget Sound, listed as an endangered species. Pending review, such a listing could have serious impact, like restricting whale watching industry, and designating habitat critical for the whales' survival. However, as each case varies widely, no one will be sure unless designation happens.

This petition is unprecedented because the Center is asking for protection of these whales as a sub-species — a tribe with specific, unusual traits and behaviors specialized to the Northwest.

Northwest populations of Orca whales are divided into four distinct groups: the northern and southern residents, transients and offshores. Residents are divided into the southern and the northern pods, or family groups. True to their name, the southern residents stay within their home range, from the outer coast of Vancouver Island to the inshore waters of the Puget Sound and the southern Strait of Georgia.

The southern resident group is comprised of three pods, J, K and L, and totals about 82 whales as of last year, down from a high of 98 in the mid-1990s.

"They're not getting caught, and they're not getting shot and they're not dying of natural causes," said Ken Balcomb, who has been researching the whales in Friday Harbor since 1976 at the Center for Whale Research. One reason many believe the whales are declining is that their main food source, salmon, is listed as an endangered species.

"The current information we have is that prey resources, fisheries' stocks of salmon, are drastically declining," Balcomb said. While the whales seem to prefer salmon, when food is scarce, they will eat bottom-feeding fish, highly laden with toxic Polychlorinated Biphenyls or PCBs, he said.

"PCBs are one of the most significant classes of chemicals in the sense of adverse health effects in top-of-the-food-chain [predators] like killer whales or humans," said Dr. Peter Ross, a research scientist for the Institute for Ocean Sciences in Sidney, British Columbia. Ross specializes in wildlife toxicology.

"These do not kill us outright, but are slow-acting chemicals that affect health in chronic ways," he said.

PCB contamination can suppress the immune system of the whales, where immune responses are diminished or nonexistent, like the AIDS disease, Balcomb said. PCBs also interfere with normal reproductive systems and the frequency of viable offspring.

Males usually live to age 50; females 80. Van Leuven tells the story of 21-year-old J-18, who washed up dead with an ulcer on his stomach wall that reached through to his outer skin.

"PCBs are industrial contaminants left over from 30-60 years ago," Balcomb said. "They just don't break down very fast."

PCBs were widely used in the United States and Canada as industrial lubricants, HE said, before they were banned in 1977.

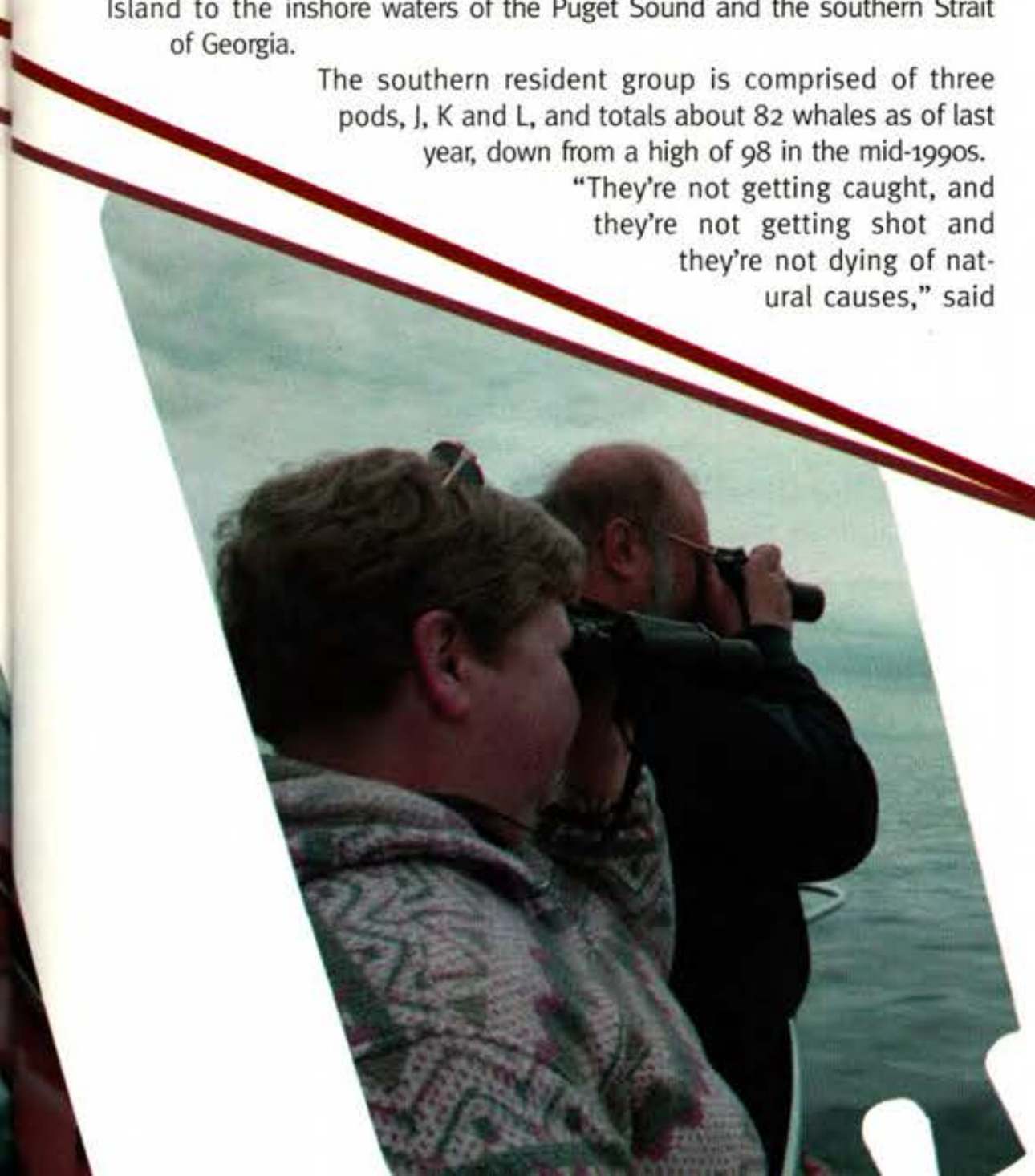
"These chemicals were used because they are very stable, a real advantage to industry," he said. "But that's why they're going to be a problem in the environment, because they are not going away."

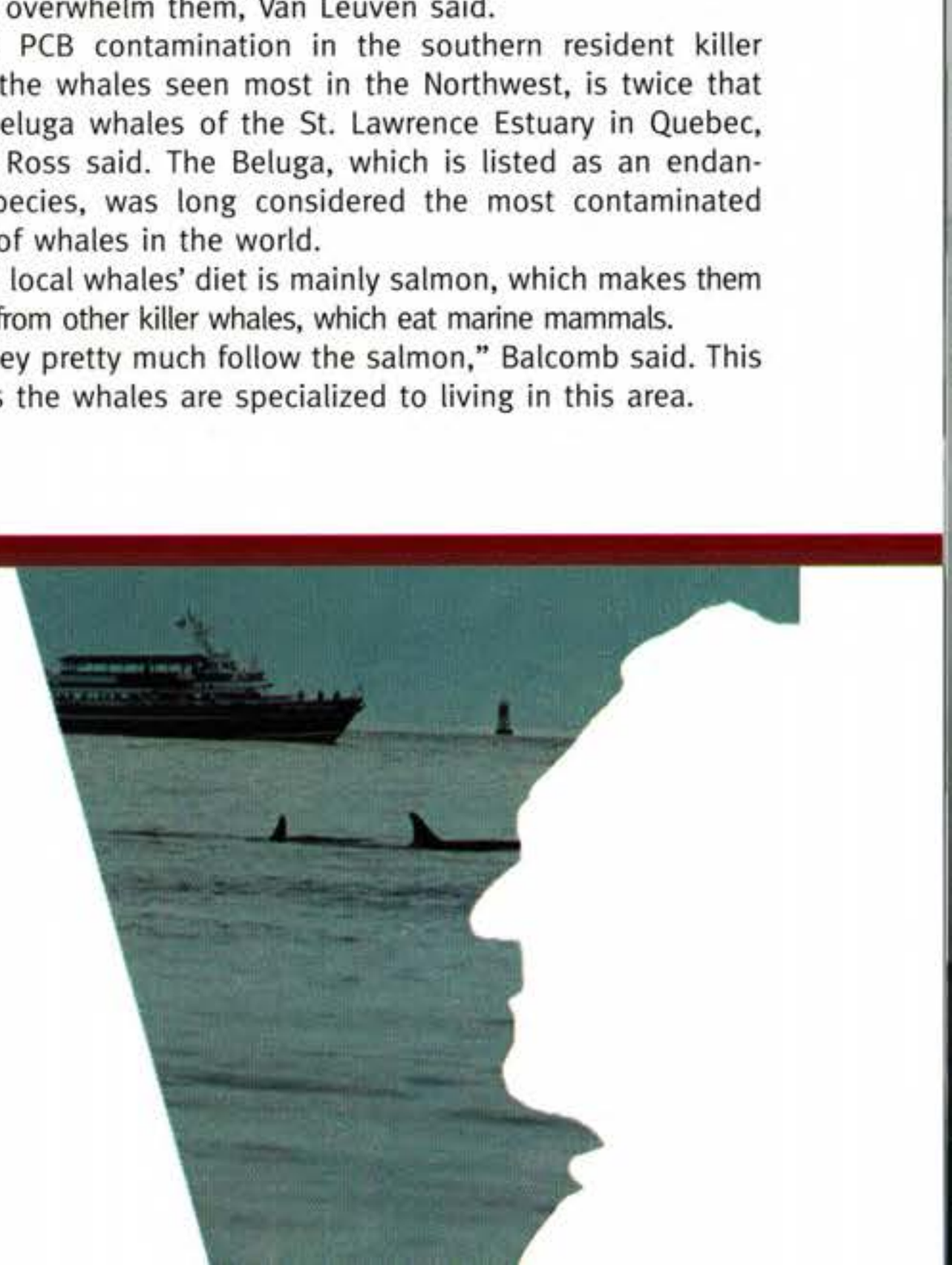
When food is abundant, the whales appear healthy because the toxins are stored in their blubber. If prey is scarce, the whales begin to metabolize their blubber and the toxins seem to overwhelm them, Van Leuven said.

The PCB contamination in the southern resident killer whales, the whales seen most in the Northwest, is twice that of the Beluga whales of the St. Lawrence Estuary in Quebec, Canada, Ross said. The Beluga, which is listed as an endangered species, was long considered the most contaminated species of whales in the world.

The local whales' diet is mainly salmon, which makes them different from other killer whales, which eat marine mammals.

"They pretty much follow the salmon," Balcomb said. This indicates the whales are specialized to living in this area.





"I'm confident that they are resident to this area, and if they disappear we are not just going to magically have other whales showing up to be residents of Puget Sound," Balcomb said. The researchers, in conjunction with The Whale Museum and the Friday Harbor community, have given the whales unusual names such as Granny, Ruffles and Doublestuf, among others. Balcomb said each whale is as individual as a person. Besides their personalities, they function as crucial indicators of the Northwest's health.

"They're not biologically much different than the northern residents ... but the fact that they're our neighbors, and live right here, whereas others don't, they're much more indicative of the health of this ecosystem," Balcomb said. He explained that as the top predator in Puget Sound, whales are the big recycler of the ocean. They break down their large prey resources and, through biological processes like defecation, redistribute the nutrients broadly.

"[The top predators are] going to be your first indicators as to whether or not the ecosystem health is declining," Balcomb said.

The ecosystem's health is at stake, but so are the traits that make the whales special. Each pod communicates with a distinct dialect, a variety of clicks, whistles and signals. The "language" passes down from mother to calf because pods are matriarchal.

"We know from the photo-ID work that the mother/offspring bonds are extremely strong," Balcomb said. "It appears to be for life, forever; a very tight social structure."

Balcomb doesn't need to articulate his love and passion for these whales. It shows in his 25-year dedication to painstaking study.

"These are individual whales — some of them are real vivacious, some are kind of slow and shy, slow in the sense of whether they respond to your presence," Balcomb said. "It's an age thing — some of the younger whales are really frolicky and energetic, some of the older whales are more serious."

According to studies from the Center for Biological Diversity, resident whales, those that stay in the same area, like the Puget Sound whales, and transients, those that travel the oceans, have reproduced in isolation from one another for thousands of years.

"The southern residents look to be isolated genetically and culturally," Ross said. "We know that they are in discreet populations that do not usually interbreed."

These Puget Sound whales are the most urbanized in the world, coming in contact with more people here than anywhere else. With all the threats facing these marine mammals, whale watching has come under attack by some activist groups. The groups accuse the boats of interfering with the way the whales communicate as well as polluting the water and creating more stress for the animals.

"These Puget Sound whales are the most urbanized in the world, coming into contact with more people here than anywhere else."

The magnitude of the boats' effect is unclear. Ross cited concerns like noise and direct disturbance. For example, obstruction by the boats could interfere with the whales foraging habits, since they use echolocation, or sonar, to find their prey. These interferences could stress them to a point where they are more susceptible to disease.

The only federal guidelines imposed are by the Marine Mammal Protection Act, which dictates "no harassment" of marine life, and regulations insisting that humans must keep a distance of 100-yards.

"I don't think it makes much sense to say, 'shut down the whale watchers' and continue to produce toxic chemicals," Ross said. "But at the end of the day, we're going to have to figure out how to minimize our impact on these animals."

The whale watching industry has grown dramatically over the past 20 years, so the immediate presence of the vessels around the whales has increased, Balcomb said.

"But in observing the whales, it doesn't seem to have modified their [behavior]," Balcomb said. "They haven't abandoned the area, they still come here if there are prey resources."

Once the whales are sighted, boats of all shapes and sizes crowd around them. Today, the pods are traveling, spread out across a mile of water and moving fast. The watercrafts race each other and try to anticipate where the whales are going and where the operators can give their passengers the best look.

"We have the strictest whale watching guidelines in the world," Van Leuven said.

Besides the Marine Mammal Protection Act, commercial boats are self-regulating, with a voluntary system of guidelines outlined by the Whale Watch Operators Association-Northwest. The members of the association pay dues that fund research. The group also conducts meetings, heads committees and records sightings.

Van Leuven talks to another operator on his radio, sharing information about which whales they've seen and speculating on where they might be headed. Some operators share locations, he said, and some don't.

"We're not all one big happy family out here," Jensen said, laughing a bit and shaking her head. "There are a couple of operators that push the line a little bit, but even those aren't everyday."

Jensen pointed out that the private boaters create an even larger threat.

"Ninety-nine percent of them are there to do the right thing," Jensen said. "Some are intentionally very selfish; they want that image that's been shown to them by every knick-knack store and 'Free Willy' movie up and down this coast.

"Everybody wants that experience. They've seen these fabulous images and that's want they want — I think that's why people push the limits," she said.

The long-term effects of such crowding into the whales' habitat are unknown, and everyone agrees more studies are necessary.

"They [the boat operators] do work together; they idle engines, stay within 100 yards, and so on," Ross said. "But on a nice day, you might have 20-30 boats, kayakers and recreationists, who might not know the rules, and the whales will be followed for many hours, and they'll all be jockeying for position."

"[Whale watching] provides an incredible educational tool," he added. "But at the same time, we do not want to adversely affect these animals. The responsibility is on everybody to learn about the needs of these animals and minimize impact."

While the future of the whales' health is unknown, it seems enough people in this area have a love and respect for these animals, as well as a vested stake in them both directly and indirectly, to ensure at least some protection.

These interests do not always conflict. The people who depend on the whales for a living have just as much of an interest in the animals' health as anyone else. It seems, however, that the Puget Sound community would not just lose money if these whales falter — they would lose a neighbor, an icon; something irreplaceable.

"I see whale watching as a constituency for the whales," Balcomb said. "They are there to see them, enjoy them and appreciate them. And perhaps it is arguable whether or not they cause a nuisance or stress problems ... I tend to doubt it, given what I've seen and the history of the whales in this area."

"Our main goal is to show these people how fabulous these animals are," Jensen said. "These are not just whale watching trips, these are wildlife trips. This isn't Disneyland — I concentrate on the landscape, from the mountains to the sea, and all the wildlife.

"You can't appreciate an animal unless you appreciate the whole ecosystem."

(design by) Erica Davenport

cultivating peace

On a small patch of land, students and Bellingham locals share religious convictions and green thumbs. **Katy Mullen** unearths why one man's dream has become a community's inspiration.
Photos by Chris Goodenow.

(design by) Curt Woodward

The seeds that Project PEACE volunteers plant in Fairhaven College's Outback Farm community garden have deeper roots than the tendril strands growing into the earth. They represent hope for peace and religious understanding.

Every Monday evening before the work begins, the volunteers hold hands in a circle as Jason Goldberg, founder and organizer of Project PEACE, leads the group in a prayer for the weather and land. Goldberg, 36, is careful to represent all faiths; he concentrates on religious similarities. Although he is Jewish, the religious backgrounds of the volunteers vary. The group disperses and begins to shovel compost on the new strawberry patch.

The multi-faceted project has many goals: a short-term goal to strengthen bonds among faith communities in Bellingham, especially the Jewish, Islamic and Christian faiths; a middle-range goal of feeding the homeless of Bellingham; and the long-term goal of attaining world peace.

Volunteers walk the muddy paths to scoop compost from the pile and sprinkle it onto one of the many tilled beds; they pull weeds and plant seeds.

"I can see it now," says Goldberg, stooping over the freshly planted strawberry beds. "Flats and flats of strawberries to take to the elderly and the homeless shelters. They aren't the most nutritious, but they are food for the soul."

Whether rain or shine, a similar scene is repeated at the garden every week. Community members and students from various religious groups gather between 5 and 8 p.m. to shovel, till, plant, eat organic food, and share similar goals of social justice and religious understanding.

The program's mix of religion and gardening is mild and casual. The volunteer gardeners ask and answer questions about their faiths and religions and talk to Goldberg about his travels and experiences in Mexico and Israel.

Katie Frankhauser, Western student and leader of the Christian environmental club, Target Earth, which focuses on Christian environmental stewardship, heard about the project through her roommate and decided to get involved.

"I thought it was interesting. It appealed to me because it is a faith-based project and it draws together people that have the same passions as I do," Frankhauser says. "I also have a personal interest in gardening and sustainable agriculture.

"One night ... (Goldberg) was throwing out great questions to me and some of the Hillel students about faith: what passages a girl chose for her bat mitzvah ... what baptism, different denominations, tenets of faith and symbols mean. It's neat to get a different perspective on what passages from the same text [the Old Testament] mean."

Tonya Jones, 30, Project PEACE budget authority and volunteer, says she finds the interaction and communication between the volunteers the most interesting. Although she does not come from a strong ethnic or religious background, she does notice the commonality of religious traditions.

"Project PEACE facilitates some conversation to share beliefs in a way that isn't threatening and finds similarities," she says. "The main similarity is the planet. It's not a new idea but it takes conscious effort for people to sit down with attention to learn and not to argue views or convince each other."

Katie Kajdan, a member of the Catholic ministry, heard about the project at the Shalom Center and was inspired to join because of both the gardening aspect and the mission.

"My father used to have a garden ... I really miss it," Kajdan says. "It feels good to get dirt on my hands and face and Jason's vision is so amazing. It is exciting to see someone have such passion and then follow through with it."

The Middle East is the birthplace and center of these three major religions. Each derives its belief system from similar doctrines of the Old Testament of the Bible, but it also has been the site of religious violence and land disputes for many years.

The idea for Project PEACE first came to Goldberg while sailing. He dreamt of a small fleet of boats traveling around the Mediterranean rim carrying a group of "healers," experts in natural medicine, alternative technology and organic farming.

He was on a boat off the coast of Mexico and another boat with the name "La Paz," Spanish for "the peace," sailed by him.

"The letters flashed before my eyes and I said 'peace' and then I started writing down the letters P-E-A-C-E: Program for Environmental and Agricultural Education, he says. "I started crying because I realized I had just received something, a message; it was a great feeling," he says.

"The three major faiths come out of Jerusalem and peace must start there first," Goldberg says.

Goldberg fell in love with Israel when he went there with his family at age eight.

He returned as an adult and lived on an Israeli kibbutz where he was introduced to community gardening. In the early 1900s Kibbutzim emerged as communal living settings for farming. At 18, Goldberg became an Israeli citizen and was drafted into the Israeli army for two years. His brief experiences in the war influenced his goals for Project PEACE.

In Goldberg's opinion, even if someone could win a war, the problems of the world - environmental degradation and spiritual misunderstanding - would still exist. He says these problems can be healed through organic community farming and community interaction.

"There is a story in the Bible where a man asks a rabbi to sum up the universe while standing on one leg. The rabbi replied, 'love your neighbor as thyself,'" Goldberg says. "It is up to us to do it together. I believe that God wants all of His children to come together. In our current environmental predicament, we are given the opportunity to work together. We must realize the importance of organizing, clean air, water and food and that every action we take moves us closer or further to environmental catastrophe."

Although Goldberg has spent much of his life traveling, he has settled for the moment at Fairhaven College. He chose the Bellingham area to begin the first phase of the project because of the Outback Farm and the community he found here while living on Lopez Island in the San Juans. As a sustainable agriculture major, Goldberg made Project PEACE his senior project.

Starting in Bellingham, the group's hope for the project is to bring people from different religious backgrounds together in a community garden to grow food to be donated to people in need, but also to cultivate bonds of understanding between Christian, Muslim, Jewish and all other faiths. No particular timeline has been set, but eventually the lessons learned in this "pilot project" will be taken to the Middle East.

Started in 1972, the Fairhaven College Outback Farm provides a five-acre space for organic gardening and contains a native nursery, wetlands, a greenhouse, and the community garden where Project PEACE is located.

A main reason for choosing the Outback Farm was use of the plot of land established by the Fruitful Gatherings, a local non-profit agency. Fruitful Gatherings is a project through the Institution for Northwest Community Advancement (INCA) that concentrates on Community Food Security, a practice where farms' surplus crops and food are taken and distributed to those who need it. Another source of donated food comes from community gardens.

Because of the common vision of Fruitful Gatherings and Project Peace, the two merged.

"The volunteer situation is usually pretty transient," Thomas Vroom, volunteer community gardener for Fruitful Gatherings, says. "I'm amazed at how many people have been involved so far. One day we had 15 people working. We got so much done in so little time."

Vroom believes gardens are an incredible way to build community and bring together people who otherwise would not gather.

"I see a community growing here," Vroom says. "Groups of people are coming together to integrate, hang out and talk. There are no distractions of school or life, just a couple hours a week to be around each other."

Lance Culnane, 19, member of Target Earth, says he enjoys meeting new people with similar interests.

"I think it's a good idea to get the faiths together and get to know who the people really are," he says. "I see how much we have in common, the love of God, loving, serving and following His ways, and in this case the earth too. You don't see many clubs like this; that includes lots of groups. Usually groups are just for one group of similar students."

Daniel Droker, 23, a member of Western's Jewish student group, Hillel, joined the project because he viewed the project as action rather than talk.

"The idea of promoting peace by having people of different faiths work together, instead of just talking about getting along, and especially doing work that benefits those in need sounded like it had a good chance of working."

Even though the Project PEACE has received immediate support from religious student communities such as Target Earth, the Catholic community at the Shalom Center, the Jewish Hillel of WWU and Ba'hai, numbers are relatively small and no Islamic students have stopped by the garden to work yet.

Droker says working with people of other faiths has been a joy. But he would still like to see a greater variety of faiths represented. All faiths are welcome but the project's late-spring start may have limited the number of volunteers.

Goldberg says a fear of the unknown is another possible limitation.

"There is too much fear," he says. "It is a big deal for some Islamic people to get together with Jews no matter what and it is a big deal for some Jewish people to get together with Muslims no matter what."

He says people must learn to love themselves and others while learning to let go of fears.

"We're not focusing on negative things and we're not going to sit in the gardens and argue, we're going to grow food," Goldberg says. "The earth is what we all share in common."

The majority of the volunteers plans to continue working on Project PEACE this summer or when they return in the fall. The group hopes to continue work in the garden and distribute some food this summer, but then start up the project strong in the fall.

"Not too many people say this project is a bad idea," Goldberg says. "Most people say, 'Wow Jason that's really beautiful,' and wish me good luck, but we need people to help. This isn't my dream, it's ours together.

"When we dream, that place exists – spiritually," Goldberg says. "It is our job as humans to manifest it, to use our hands and body to manifest it into reality."

Back at the garden there is enough work for several hands and bodies. Strawberries are the first of many crops to be planted in the Project PEACE dream.

"I think that the small level is what makes the difference," Kajdan says. "It's the exponential change idea, if everyone donated a dollar ... if everyone breaks down a barrier, who knows what could happen."

"We're not focusing on negative things and we're not going to sit in the gardens and argue; we're going to grow food. The earth is what we all share in common."

One of the three medical waste plants in Washington is under scrutiny and one court's decision could change its existence. **Erin Crumpacker** investigates what's inside those biohazardous waste bags. Photos by Chris Fuller.

A white delivery truck spews a cloud of dust as it parks outside Recomp, a medical waste facility on Slater Road in Ferndale. A man in a white full-body Tyvex suit grabs a black plastic container from the truck containing a red bag marked "biohazardous material." A large bin on a conveyer belt moves toward him. He lifts the container and tips it into the bin. As the red bag falls, a liquid substance plunges into the bin before the bag reaches the bottom.

Blood-soaked bandages, removed body organs, syringes, surgical gloves, culture dishes and old surgical instruments fill these red plastic bags.

Once the bins are full, the conveyer belt moves the bins on to another conveyer belt that transports each bin into a blue oval-shaped steamer called an autoclave. The machine steams the infectious waste at 325 degrees Fahrenheit for 30-45 minutes, while the five Recomp employees spray phenol solution on the floor, disinfecting everything. Once pressure within the autoclave reaches equilibrium, the door slowly opens and a massive amount of steam rushes out, hazing the windows of the observation deck. Soon afterward, the bins are dumped into a compactor, which packages the waste and prepares it for disposal in an eastern Washington landfill.

Most people don't think about medical waste and its disposal, but in Whatcom County, Recomp is at the center of controversy.

Is it in the county's best interest to keep Recomp operating, or would shutting it down increase public safety?

If Recomp were to close, the infectious waste may go to another waste facility. Members of the community view hospital treatment of medical waste as a possible solution to disposing of infectious waste safely.

Dr. Frank James, San Juan County health officer and former Whatcom County health officer worked with Recomp from 1989 to 1999. He said he sees the transportation of medical waste to Recomp as the primary risk to safety and believes on-site treatment is a solution.

"There will always be concern about the risks," James said. "It's up to the community to decide if they are comfortable with the amount of waste that comes to Ferndale. Autoclaving the waste prior to transportation would be preferable."

Barbara Brenner, Whatcom County council member said she worries about the amount of waste that comes to Ferndale.

"The more waste there is, the more the public is at risk," Brenner said.

In 1999, she proposed an ordinance stating infectious waste should be less than 0.3 percent of the general solid waste stream. The ordinance passed, but Judge Thomas Zilly of the U.S. District Court declared it invalid because the county council did not follow all the procedures for adopting the measure. This decision is now being appealed.

Brenner has tried to regulate the handling and the treatment of infectious medical waste in Whatcom County since the late 1980s.

In 1988, Brenner interviewed two Recomp employees at her home. Days after, Brenner discovered both employees had viral meningitis. Her 3-year-old son Colin had been in the room with the employees during the interview and began having meningeal symptoms.

"He had a high-pitch scream that sounded so violent," Brenner said. "It wasn't like the flu. He couldn't move his neck and he was vomiting. This is something you don't forget."

According to a 1988 report written by Peter Houck, MD for the Department of Social and Health Services, an outbreak of aseptic meningitis peaked in Whatcom County in mid-September and ended by the first week of December. Aseptic meningitis is the inflammation of the membranes that cover the brain and spinal cord. This type of meningitis is mild and treatable. The symptoms include nausea, vomiting, fever, severe headaches and a stiff neck. Forty-four people in Whatcom County were identified as having aseptic meningitis and 20 people were diagnosed with probable meningitis. These 20 people did not undergo the lumbar puncture test that checks the spinal fluid for meningitis.

Brenner said, prior to the Whatcom County outbreak, Recomp handled waste from a Seattle hospital, which had a similar meningitis outbreak.

Brenner said it's possible Recomp, formerly Thermal Reduction Co., contributed to the outbreak of meningitis in Whatcom County.

"There's no way to prove that my son got it from there, but we shouldn't have to prove it," Brenner said. "It's ridiculous not to think there's a probability."

Eleven years later, in 1999, several workers at the Stericycle medical waste facility in Morton, Wash. were exposed to tuberculosis because of a machine failure.

Chris Strommerson, environmental health and safety area manager for Stericycle, said Stericycle uses an electrothermal de-activation device, and added that the medical waste process differs from Ferndale's autoclave system.

He said the waste at Stericycle goes into a shredder, and then enters through electric plates that heat it to 203 degrees Fahrenheit. Afterward, it cools on a rack.

Andrew Bright, Recomp's community relations representative, said the overhead vacuum's filter that circulates the air got clogged and quit working, causing the employees to get sick. The filter's failure allowed infectious agents to become airborne.

Brenner said in order for the public to be safe, the medical waste in Whatcom County needs more regulation.

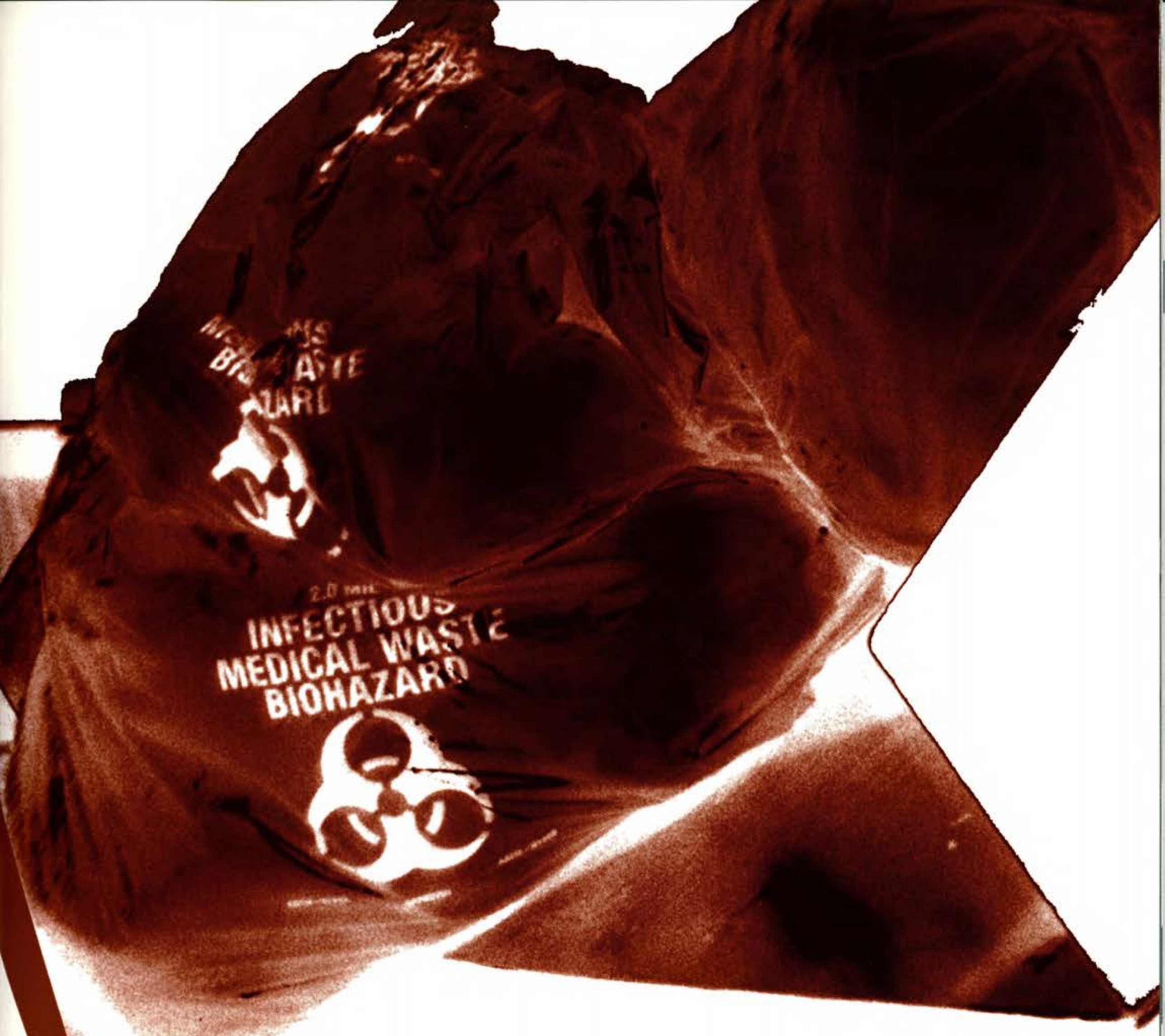
Bright said the conditions of Brenner's ordinance would eliminate more than 90 percent of Recomp's current waste processing.

"What this means for Recomp is it would have to be shut down," Bright said. "There's no way that it could possibly survive. The facility is a business and to survive, you have to run a profit."

He said at first glance, Brenner's ordinance seems like a good idea. But Recomp's representative thinks differently about the risks.

"Shutting down the facility is a greater risk to public health," Bright said. "More important than the amount of medical waste processed is the way in which it is processed."

He said Recomp was built specifically for processing medical waste and is regulated by three agencies: the health department, the Department of Ecology and the Northwest Air Pollution Authority to decrease the risk.



CONTROVERSIAL DISPOSAL

"If they do one thing unsafe, they are going to be shut down," Bright said. He said Recomp is held highly accountable.

"If they are down a degree in temperature," he said. "If they are short a minute in the length of time. Those can be reasons to shut down."

Brenner thinks otherwise.

"Is (Stericycle) shut down?" she asked? "No."

"I don't call that major liability," Brenner said. "They're (Stericycle) still using the shredder."

She added that Stericycle was fined $1,100 for the tuberculosis incident but has appealed the decision.

She said Recomp makes a lot of money per pound of waste and for that reason she questions its incentive to be safe.

Noel Nobrega, Recomp facility manager, said each deal the facility has with hospitals is different.

He said Recomp only processes infectious waste. It does not process three types of waste: chemotherapy, pathological or pharmaceutical waste. This waste needs to be processed differently, so Recomp packs it into a refrigerator trailer at 32 degrees Fahrenheit and sends it to Stericycle for incineration.

He said Recomp processes 400,000 pounds of infectious medical waste each month — 276,000 pounds of that comes from Canada.

"They have a facility in Calgary, but for shipping reasons it's less expensive to come here," Strommerson said.

He said Canadian waste is delivered directly to Ferndale. Whatcom County's waste, however, is transported in trucks that go to the transfer stations in Kent and Woodinville. Once the waste arrives, it gets dispersed to one of three medical waste plants in Washington. St. Joseph Hospital's waste goes to Stericycle.

Nobrega said Canada's waste comes to Ferndale because British Columbia's medical waste facility was shut down.

"In Canada, it was put away because it was cost-effective," Nobrega said. "They weren't getting enough waste to process."

The timeliness of the facility's closure worked in Recomp's favor. Recomp replaced the pollution-causing incinerator with the autoclave sterilization system from Canada.

An autoclave may be the best way to sterilize waste. But what are the alternatives for medical waste disposal? Brenner argues that on-site medical waste treatment would be the best possible solution.

Sheri Kiser, administrative assistant for Mark-Costello Co., a manufacturer of autoclaves, said six hospitals in Washington currently treat medical waste on site.

"We prefer on-site treatment for hospitals," Kiser said. "It's always safer to treat it (waste) before it leaves the facility. It's not in a truck where it's co-mingled with some other place's waste."

She said on-site treatment in a hospital would cost 12-15 cents per pound. When hospitals ship the waste she said it costs 20-50 cents per pound.

"When you haul it as infectious waste, it costs more than solid waste," she said. "Hospitals are paying for the convenience when trucks come by and pick it up."

Recomp officials see several problems with on-site treatment.

Bright said the most important thing to Recomp is public safety but added that an autoclave system in hospitals would cost doctors and customers money.

"They would have to pay to install the proper equipment in their facility and then pay for the different inspections, the quality and the training and the people," he said.

Kiser said the payment of the autoclave would depend on each hospital.

"They would have to decide if they want to hire more employees or not," Kiser said. "Basically as far as labor goes, it's a trade off."

Bright said last year the health department visited Recomp 16 times.

"It's not just a poke your head in and say 'ah it's clean' and then walk away," Bright said. "They're there for about 2-3 hours.

"The health department has told us that with one central facility they can do that," Bright said. "If you take that and suddenly disperse it over hundreds of separate facilities in Whatcom County there is no way that the health department can come once a month. Probably not even twice a year. They don't have the financial resources or the people power to be able to do that level of inspection."

Kyle Dodd, Whatcom County Health Department inspector, has examined Recomp more than 20 times.

"I have never had any violations," Dodd said.

He occasionally notifies the facility of his visits but said 80-90 percent of his visits are unscheduled.

The inspection form the health department uses was developed by Recomp's plan of operation, he said.

One part of Dodd's visits involves conducting a spore sample. The spore is a virus called bacillus subtilas. It is placed in the autoclave and goes through the sterilization process. In this test Dodd checks to make sure the spore was killed. He said the spores have been killed every time he has visited Recomp.

Dodd also checks the autoclave's chart recorder, which tells him if it reached the right temperature at the right time. He also checks to see for debris on the ground.

Brenner questions the health inspections.

She said through interviews with former Recomp employees, she has gathered statements that the visits from the health department are never unexpected and that the workers aren't always wearing the proper protection equipment.

"These guys are so invisible," she said. "They could get sick and no one would know."

Recomp, in an effort to increase awareness of the medical waste process, sent a 12-page memo to the community responding to Brenner's comments concerning its facility.

Brenner took those responses and presented evidence refuting each one in a memo she addressed to Whatcom County Council members on April 17.

Recomp's statement said employees "are required at all times to wear such protective equipment as coveralls, puncture-resistant gloves, liquid-impermeable latex gloves, hard rubber safety boots/steel-soled or leather steel-toed boots and face shield."

Brenner questions the "at all times" claim.

A photo accompanying the July 6, 1999 Bellingham Herald article, "Panel eyes Recomp's medical waste," shows Chad Solomon of BFI Medical Waste Systems sanitizing the biohazardous tubs after they were emptied at Recomp. Solomon was not wearing a face shield.

"There will always be concern about the risks. It's up to the community to decide if they are comfortable with the amount of waste that comes to Ferndale."

A local attorney, who wishes to remain unnamed, represented a former client of Recomp in 1999. He sent Brenner a letter on Feb. 22, 1999, regarding the case.

An excerpt from the letter reads, "We have signed statements from workers that report workers routinely were required to handle leaking containers which dripped and splashed on their clothing. These containers contained raw biological waste. Workers reported that they were given inadequate hand protection. Many workers report being stuck by needles, in addition, they report being discouraged from filing labor and industry claims."

The attorney said he couldn't discuss his client's case, but added that the litigation his client and Recomp were involved in concerned procedures using an incinerator.

Brenner said the county council is acting on the procedures that were skipped and said Whatcom County should know by winter if the ordinance will be adopted.

Whatcom County has spent more than $80,000 in legal costs defending this ordinance.

Meanwhile, Recomp will continue to process infectious medical waste in Ferndale.

"Human error is human error," Bright said. "When you're dealing with people, you can't guarantee that anything will be fool proof. You just have to do the best job that you can and stick to the regulations."

(design by) Julie A. Stone

A week after her rape, the memories that June* couldn't recall while she was awake began visiting her in her sleep.

If her boyfriend started snoring while he lay next to her, June would hear the heavy breathing of her attacker instead. Thrashing through her bed sheets, June would try to fight off the man, who she was unable to combat during the actual rape.

June, a Western student, was visiting a friend's home in San Diego, Calif. that day in September 2000. The man, "the very large person," had been with her while she helped a friend who vomited after drinking too much at a barbecue.

June's friends hosted the barbecue in her honor. She wore a bright yellow sweater and summer dress that day. She smiled for photographs. She chatted with friends.

"When you're around people you trust, you don't expect it to happen," she said, bewildered.

She never noticed the man slip a pill that probably cost less than $5 in the cobalt blue glass of vodka lemonade she was drinking. It was around 8 p.m. and only her second drink since noon. June wondered why sudddenly, halfway through the drink, she felt so sleepy. She lay down next to her sick friend and let her eyelids close.

The next time she opened her eyes, the world was a blur. Through squinted eyelids, she saw a gray silhouette of the man on top of her, but his face was too close and the room was too dark to recognize. Before her pupils could focus, she felt the weight of his body and the feeling...

Her body was being ravaged — he was raping her.

June couldn't react, her body was pinned under his and her limbs felt limp. She blacked out again.

Hours of lost time seemed like seconds and June awoke early in the morning — naked on the floor of her friend's spare bedroom.

"I felt sore all over — like I just had a very large man on top of me," June said. "I had that soggy feeling ... when you've just had unprotected sex." June scrunched her face as she spoke the words.

That morning, June said she reacted to her situation without thinking — without feeling. June rose and gathered the summer dress she was wearing the night before and took a shower to clean her semen-stained legs.

After the rape, June said she felt "dirty" all the time and took frequent showers.

June originally had planned to stay with her friends in San Diego for another day, but instead called a cab to drive her to the train station. She said she needed to be somewhere "mellow" and her friend's house didn't suffice. June departed to her grandparents' home in Ventura, Calif. before her friends even awoke that morning. Later her friend asked where she had "disappeared to" that night. June never told her friends in California about the rape. She said she didn't want them to feel guilty for letting it happen to her.

The next day she departed for Seattle on a red-eye flight, spent the night at a friend's house and drove to Bellingham the next morning. As soon as she arrived in Bellingham, June went to a walk-in clinic. A doctor took samples of her blood and urine, swabbed her uterus and found dead sperm — confirmation of the assault.

Two weeks later, the tests returned negative results for pregnancy, AIDS, other sexually transmitted diseases and drugs. June's doctor told her, based on her symptoms, she had probably been given Rohypnol, a drug called flunitrazepam by medical professionals, or "roofies" on the street.

Fiona Couper, from the Washington State Toxicology Laboratory, said she has never seen a positive test result for Rohypnol in Washington state. Some people, however, have tested positive for gamma hydroxybutyrate (GHB). Both drugs are illegal in the United States, are odorless and tasteless, can be colorless, and can produce drunken-like effects and cause temporary amnesia. Both are flushed from the body in 24 hours and most people aren't tested soon enough, she said.

"In quite a few cases, we are not finding anything," Couper said for the laboratory, which is the only one in Washington equipped to test for GHB and Rohypnol. "Unless the sample has been collected in six to 10 hours, we're never gonna see it."

These low positive test results tempt some pathologists like Dr. Gary Goldfogel at St. Joseph Hospital to deduce that rape drugs are not a problem in Whatcom County.

"I think these drugs are greatly overrated for the things they can do," Goldfogel said. "We are not finding them to the omnipresence they are presented."

But others disagree.

"If it happens to one person and that person is you or is your best friend or your daughter or wife, it's a problem," said Michaelene Lippert, a licensed pharmacist and a clinical associate professor of pharmacy at the University of Washington, who teaches about rape drugs in one of her classes.

Any drug given to a person to aid in a rape is considered a rape drug, Lippert said. People can take the drug voluntarily or involuntarily, and if they are sexually assaulted, the assault is still considered rape, she said.

Whatcom County Sheriff's Deputy Art Edge echoed Lippert, saying, rape drugs are "prevalent in Bellingham, for sure," he said.

Edge said GHB presents a greater threat than Rohypnol because anyone can easily make it at a home lab. Also, Edge said, thieves have broken into three Whatcom County veterinarian clinics, looking for an aesthetic called ketamine, which has similar effects and properties as Rohypnol and GHB. Rohypnol is not as great a problem in Whatcom County because it has to be brought in from Latin America where it is legal, he said.

"Whether it's the rape scene or just for experimental use, it's available," Edge said.

For A.J. Lucido, the problem of rape drugs became a reality after he searched for an explanation of his hazy memories of New Year's Eve 1999.

The feeling consumed Lucido before he could think, speak or move. First, his fingers and toenails felt like jelly, then his arms and legs yielded themselves to the feeling.

Yet he managed to stand in Bellingham's Rumors Cabaret in the first minutes of New Year's Day as a young woman spoke to him. He struggled to listen to the congenial woman who had bought him a glass of champagne 10 minutes before the clock struck midnight. He tried to focus his eyes but failed. He squinted to stop his surroundings from spinning.

"I've drank before," Lucido, a Western graduate, said. "I've never really been that drunk. I've always been able to walk."

But Lucido said he couldn't have been drunk. He drank two glasses of beer and two glasses of champagne in three hours. For a man his size, 160 pounds, that computes to a .04 percent blood alcohol level. Lucido could have legally driven home.

Lucido stumbled away from the woman, out of the bar and walked doubled-over along Railroad Avenue, using the dome street lamps for support.

When he awoke at 1 p.m., at his friend's apartment, his body felt like it was 300 pounds, he said. His fingernails, which seemed like jelly the night before, were like anvils. Lucido dragged himself into the bathroom to wash off his face. As he rested his hands on the sink rim, he noticed its basin was filled with vomit.

He said he has no recollection — not even a flash of a memory — of throwing up in the sink. Even when he was drunk before, Lucido said he was always able to recollect the feeling of being yanked forward by his stomach muscles as he vomited. But that night — nothing.

sible intruder

Clear, odorless and tasteless drugs, like Rohypnol, are being used as a tool for rape. **Jennifer Collins** tells the story of one woman's experience. Photos by Chris Fuller.

*June asked that her name be changed so that, "people don't look at me and feel sorry for me."

"Any drug that can be given to a person to aid in a rape is considered a rape drug. People can take the drug voluntarily or involuntarily, and if they are sexually assaulted, the assault is still considered rape."

Lucido was never tested, so he can't prove he was drugged. But when he recounted his experience to friends, who had used Rohypnol recreationally, they suggested it was the drug slipped in his drink.

Lucido was not assaulted and now considers his night "something to add to the conversation." Although women are the victims of most rape cases, one out of 33 men is a victim of rape or attempted rape in his lifetime, according to the November 1998 study by the National Violence Against Women Survey.

Lucido chose not to take legal action because he never knew the woman who spiked his drink.

June also chose not to take legal action for essentially the same reasons. She didn't know her attacker. When she returned to Bellingham and told her family and her now ex-boyfriend about the rape, they blamed her. When she asked her father why her 25-year-old boyfriend was treating her so coldly, he uttered words June said she will never forget.

"'If I was 25 and I was your boyfriend, I would probably think it was your fault,'" he said.

Realizing she would have to relive all the familial rejection from the rape if she went to trial, she opted not to. Only 16 percent of rapes are reported to the police, according to the 1992 National Women's Survey "Rape in America: A Report to the Nation." Seventy-one percent of rape victims are "somewhat to extremely concerned" about their family knowing about the rape, according to the same survey.

Those convicted of administering a drug to others without their knowledge and then perpetrating rape can be sentenced up to 20 years in prison, according to the 1996 Date Rape Act.

June is one of the one in six women who experiences completed or attempted rape in her lifetime, according to the National Institute of Justice's National Violence Against Women Survey. June said she now feels a commonality with women who have been raped.

Two female rape victims, who were not tested but thought they had been drugged, came to speak with Sarah Rankin, Western's Crime and Sexual Assault Support Services (CASAS) coordinator. Both women experienced periods of amnesia after drinking one or two alcoholic drinks, she said.

"The main thing to remember is that they don't have a whole lot of time (to get tested)," Rankin said about people who think they have been drugged.

People who have been drinking need not worry about being charged with a "minor in possession" if the test comes back positive for alcohol. Washington law provides that the greater crime of rape is prosecuted above the crime of being under alcoholic influence, Rankin said.

Since 1997, Hoffman-La Roche, the company that manufactures Rohypnol, has provided free tests for people who think they have been drugged.

Hoffman-La Roche also has phased in a modified Rohypnol pill that turns liquid a bright blue color. However, in a dark drink or a glass which is already blue, as in June's case, the color can be difficult to identify.

• Anyone who believes he or she has consumed a sedative-live substance should be driven to a hospital emergency room, or call 911 for an ambulance. Try to keep a sample of the beverage for analysis.

• If you or someone you know has been sexually assaulted, call CASAS's 24-hour help line 650-3700 (Western students only), Whatcom Crisis Services 1-877-715-1563 (Whatcom County residents), or a national rape crisis hotline 1-800-656-HOPE.

The National Coalition Against Sexual Assault reported in test results of 410 rape survivors, 30 contained GHB and five contained Rohypnol. Because Rohypnol and GHB are flushed from the human system so quickly, it doesn't mean the drugs were not in the body during the assault, Lippert said.

In 1999, Rohypnol was mentioned in 540 emergency room cases, GHB in 2,973 cases and Ketamine in 396, according to the National Institute on Drug Abuse.

At Western, 7.5 percent of students report using amphetamines, sedatives, opiates, inhalants, designer/club drugs or steroids, according to the WWU Lifestyles Project 1999-01.

"It's important to remember that alcohol is the number one date rape drug," Rankin said.

Alcohol is used in 90 percent of the rapes involving college students who know each other, according to the 1996 National Collegiate Date and Acquaintance Rape statistics.

Although June was drinking on the night of her rape, she was not drunk. After the rape, she rarely drank alcohol. She also rarely wore summer dresses.

"I think sometimes, if I hadn't been wearing a summer dress or hadn't had that drink..." June said, letting her voice trail off.

People can feel the effects of Rohypnol for up to 12 hours, but for June the emotional effects of the drug-induced rape lasted months. Initially, she said she felt numb, as though she were just trying to get through her daily activities.

"(It's as if) you have a pair of shoes that are too tight," she said as a metaphor for her feelings after the attack. "After a while it just goes numb and you don't think about it."

Although she began counseling sessions a month and a half after the rape, she said she didn't "feel the emotions" until three months later.

"She (my counselor) would make me angry because I don't like to get angry," June said. "I'm not an angry person. I'd much rather be happy."

In the past few months, June said she has started to feel normal again. The nightmares don't come as often as they used to. She even wears summer dresses sometimes.

"You wouldn't think I would be a happy person, after what I went through," she said defiantly. "But there's no other way to do it."

A few months ago, June gathered courage to develop the photos from the night of her attack — pictures she does not remember taking.

In one of the photos, a man wearing a faded blue polo shirt with a square design and holding a bright red drink is emblazoned on the 3-by-5 inch photograph. He is not smiling.

Neither does June smile as she shows the photograph. She keeps the photo of the man she thinks raped her in a Kodak envelope in the mail rack in her kitchen.

She never even knew his name.

How to protect yourself:

- Do not leave beverages unattended.
- Do not take any beverages, including alcohol, from someone you do not know well and trust.
- At a bar or club, accept drinks only from the bartender or server.
- At parties, do not accept open-container drinks from anyone.
- Be alert to the behavior of friends. Anyone appearing disproportionately inebriated in relation to the amount of alcohol they have consumed may be in danger.

(design by) Julie A. Stone

Browsing through the dusty antique booths in Bellingham's Everson Mercantile building, one may not think to peek behind the covered door in the corner of the lower floor. There, one will find a person whose profession has a history more interesting and ancient than any item in the building.

It is fitting that licensed midwife Leslie Gesner is surrounded by so many outdated items, since the practice of midwifery itself often is considered a relic from the past.

"As midwives, we've been around since the beginning of time," she said. "As a profession, we're the strongest we've been in a long time."

Throughout history, midwives were considered the sole experts on birth. But this changed in the 1930s when the American Medical Association gained power, licensed midwife Ann Tive said. At that point, more babies were delivered in hospitals by medical doctors than in the home.

"Midwifery took a real blow and was non-existent for several decades," Tive said.

The women's movement in the 1960s and 70s started to gain momentum and many women wanted to own the power of birth for themselves, she said. As a result, midwifery began to regain popularity.

According to the PBS documentary "Born in the USA," medical doctors still assist 99 percent of births, although the number of midwife-assisted births has increased over the years.

In 1975 midwives attended fewer than 20,000 births in the United States. But in 1997, that number jumped to 250,000, according to the American College of Nurse Midwives.

Many women don't want a medical doctor and a hospital birth.

"In a hospital there are just so many rules and procedures," Tive said. "A pregnant woman is just another cog in the whole operation. But at home she's in control and everyone is there just for her."

Gesner said midwives provide more personal care than doctors and this could be another reason why many mothers are turning to midwifery.

"I'm there, I'm willing to listen and I'm willing to make the time," she said. "Maybe 10 minutes of an appointment is spent on the birth table doing medical stuff.

"Most of the time is spent drinking tea and just talking about concerns and processing issues in the mother's life."

A home birth costs less than a hospital birth, Gesner said. Midwives charge $1,800 to $2,500, and a normal hospital birth costs $4,500 to $4,800, she said.

Midwives spend the entire laboring time with the mother. This time period could span several days, so Gesner always brings a sleeping bag with her when she goes to a birth, just in case she has to spend the night.

But Gesner brings much more than her sleeping bag. She carries two black bags filled with medical supplies such as IVs, catheters and an oxygen mask and tank. She also brings herbs and books about birth. She sets up the tank and makes all her equipment easily accessible, prior to the birth, in case complications arise. Then she monitors the baby's heartbeat and provides the mother with support whenever necessary.

"I'm a mirror for the mother," she said. "When she needs reassuring, I tell her she's doing the same thing that all mothers before her since the beginning of time have done."

Gesner recalled a specific birth last August that brought her in touch with what midwives and mothers experienced in the past.

She got the call late on a Sunday evening. The expectant mother's contractions had just begun. The mother was on Waldron Island in the San Juan Islands, which has no electricity and is only accessible by personal boat or airplane.

Gesner called her assistant, who is training to become a licensed midwife, and then called a local pilot to fly them over to Orcas Island where she would catch a boat to Waldron.

It was after midnight when they reached the boat launch on

Since the beginning of time midwives have been assisting women in giving birth.

Round bellied woman, beautiful, radiant. Inner light shining, with the power of creation. Laboring, with the new life emerging

Orcas Island. The small boat's captain informed them that he was a "man of the sea" and preferred to navigate by the moon and stars.

"Here we are, on the third leg of our journey in complete darkness sailing by moonlight," Gesner said.

Throughout the journey, Gesner assisted the expectant parents by cell phone. When she finally arrived at the home, Gesner was pleasantly surprised at what she saw. The expectant parents were surrounded by soft candlelight, working at bringing their child into the world.

She arrived just in time for that August delivery, and Gesner said she has only missed one birth in her entire career as a midwife.

Having a baby at home may seem appealing for some, but some medical doctors argue it is unsafe because often there is not enough time to provide emergency care to the baby or the mother.

"If something goes bad, it goes bad really quickly and you don't have enough time to save a life," said obstetrician Dr. Diane Arvin.

Midwives are not trained to perform surgeries, like Caesarian sections, and most do not use epidurals or painkillers.

"As romantic and lovely as it sounds, I wouldn't want a home birth myself," she said.

However, Dr. Arvin and another obstetrician, Dr. Nancy Hart, support the use of trained midwives in hospital births and say they can often can an enormous help.

"I love the midwives at the hospital because sometimes there are too many babies and not enough doctors to deliver them," Dr. Hart said.

It is the untrained midwives who frustrate Hart.

"It is very discouraging to see someone who's not trained, put a mother and child in jeopardy," she said.

To become licensed, midwives must attend three years of schooling, which includes 15 months in the field, Tive said. She attended The Seattle Midwifery School to become certified. Much of the skepticism surrounding midwives comes from people not understanding what they do or not knowing that they are trained and licensed, she said.

"Once they understand that I'm trained and certified, then they are very receptive," she said.

This type of misunderstanding has historically surrounded midwives. According to a Parenting magazine article on the history of childbirth, the Catholic Church considered midwives' methods unorthodox and labeled them witches, accusing them of allying with the devil by offering pregnant women painkillers such as wine, snuff and the oil of white lilies. Goose fat was used to lubricate the birth canal to ensure an easier labor.

The pain associated with childbirth was considered retribution for Eve's sin committed in the Garden of Eden.

Throughout history, midwife-assisted births were performed with the pregnant woman standing or squatting. This position allows the force of gravity to pull the infant from the womb.

Tive said this position is still used, but women also experiment with several positions such as squatting, standing, lying on their backs or sides or even being under water.

"I've delivered babies in any position," she said. "You never know what is going to work best; most women know instinctively."

The life of a midwife is not an easy one. Both Tive and Gesner also must make time for their families.

"It's not a 9 a.m. to 5 p.m. job," Gesner said. "Actually, it happens in the middle of the night most of the time."

Despite the long hours, Tive and Gesner are proud to be part of such rich tradition and history.

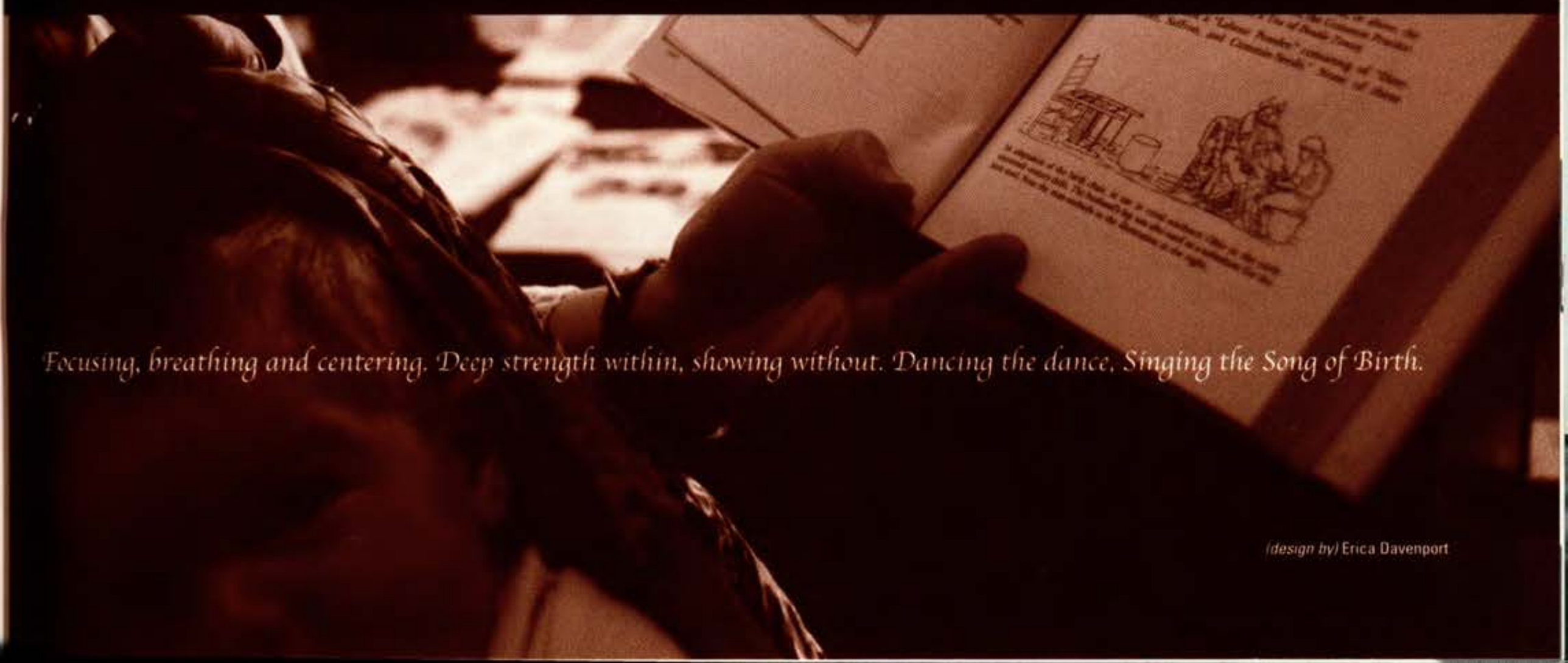
"It's something I am passionate about," Gesner said. "I don't consider it a job."

Gesner said sharing one of the most intimate moments in her clients' lives is perhaps what she and other midwives love most.

"It's a pretty magical thing to be there when a baby comes into this world," she said.

DELIVERING TRADITION

Kim Lincoln explores the career of modern-day midwives. Photos by Stephanie Kosonen.

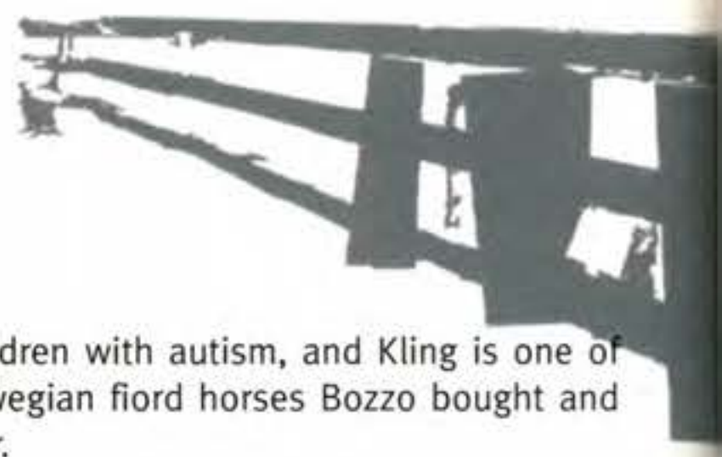


Focusing, breathing and centering. Deep strength within, showing without. Dancing the dance, Singing the Song of Birth.

(design by) Erica Davenport

New rein of therapy

The Northwest Therapeutic Riding Center offers children with special needs the opportunity to ride horses. **Celia Ross** watches as the children and animals bond through this alternative therapy. Photos by Stephanie Kosonen.



"Come on," the woman prompts, "Everybody sing, 'ride, ride, ride your horse merrily around the ring.'" The response is a chorus of fragmented mumbles. This may be due to the fact this group of young riders suffers from different degrees of autism. Or, it may just be too hard to sing and smile so big at the same time.

The petite, energetic "choir" director is Julia Bozzo, owner of the Northwest Therapeutic Riding Center, just outside of Bellingham. The center is a nonprofit organization accredited through the North American Riding for the Handicapped Association (NARHA) which helps people with autism and other disabilities. NARHA was founded in 1969 to promote therapeutic riding in both the United States and Canada, according to its Website. Currently, about 600 riding centers like Bozzo's help more than 30,000 individuals with disabilities. Other organizations that participate in NARHA programs include the Muscular Dystrophy Association, Multiple Sclerosis Society, Special Olympics, Spina Bifida Association and United Cerebral Palsy.

"When I first started out in about 1993, I had two students, one horse and one volunteer," Bozzo says.

Now she has 22 students, 10 regular volunteers, 20 part-time volunteers and four horses.

With dark, curly hair sticking out from under her riding helmet and a big grin, 10-year-old Katie Flannelly finishes the song, "Merrily, merrily, merrily, merrily, having fun on Kling."

Katie is one of the children with autism, and Kling is one of two stocky tan-colored Norwegian fiord horses Bozzo bought and trained for use at the center.

"All the therapeutic programs lust after Norwegian Fiord horses," Bozzo says. "They're sturdy, low to the ground and can carry an adult."

Katie has been taking therapeutic riding at the center for about three years, her mother, Debbie says.

The lessons have not only helped Katie physically with better balance, trunk strength and muscle tone, but have also required her to pay more attention to what is being said to her and improved her verbal skills, Debbie says.

"Katie is now loud and confident when she directs Kling to walk up. She used to speak in a little whisper," Debbie says.

Bozzo works hard getting the children to relate to each other and to the horses by promoting group participation in interactive games while on horseback. This time the activity involved rolling big fuzzy dice and prompting the children to say the number that comes up. This was followed by having the children draw a piece of paper from a jar prompting them with questions, such as name a part of the bridle, which they have to answer.

Keeping each child on the same horse, and using the same volunteer when possible helps to build bonds, which is difficult for children with autism.

"I went to a seminar a couple years ago — we have these regional things we (therapeutic riding instructors) go to once a year—and they asked us, 'What disabilities does everyone want to learn more about?' and everyone said 'Autism,'" Bozzo says.

Six-year-old William Chamblin maneuvers his electric wheelchair up to the shoulder of Kurt, the other Norwegian Fiord horse, sticks out his hand like a surgeon and says, "Brush."

The volunteer places a brush in his hand and William proceeds to groom a little patch of Kurt's tan coat.

William has arthrogryposis, a painful disorder that leaves his joints locked in a permanent contracted position and causes paralysis of his left side, explains his mother Caroline.

William hands back the brush and says, "Hoof pick."

The volunteer places the hoof pick in William's hand, then bends over and lifts one of the horse's front feet so William can clean it. The ritual is repeated on Kurt's other side. Kurt, the veteran of many routines such as this, stands quietly.

With chores done, William motors up a ramp to a platform almost level to the horse's back where he will wait as the volunteer leads Kurt over so that with a little assistance from other volunteers, William can mount.

"Wait for me, Kurt," yells William, as Kurt, obviously feeling his oats, decides to switch roles with the volunteer and leads her on a little pre-lesson spin around the ring.

When William is finally on Kurt, he is led out into the ring to begin his therapy. William does what is called "around the world," where he is turned so he sits sideways on the horse, encouraged to keep his back straight and counts to 10, then he is turned astride, but facing backwards. The procedure is repeated until he has gone all the way around the horse's back.

William doesn't want to grow into the letter "C," Bozzo explains, gesturing to the curve in William's spine.

William's therapy is almost over when Bozzo says, "You've got mail, William," pointing to a mailbox that has been set out in the ring with its red flag up.

William is led over to the mailbox, opens it, and retrieves a letter addressed to him, which with a little coaching, he reads aloud. It thanks his mom for being his mom and Kurt for being a good horse.

William has been riding at the center since he was about 4, Caroline says.

"Riding has helped to strengthen William's torso, improved his posture and balance so he can sit up by himself," she says.

William, like any normal child, ignores his parents when they tell him to sit up straight, but not when Bozzo tells him, Caroline says.

Besides the obvious physical benefits, such as strengthening and normalizing muscle tone while developing balance, therapeutic riding also helps to stimulate the digestive and respiratory systems, Bozzo explains.

"The physical movement of a horse simulates the movement of a human pelvis (walking)," she says. "And nothing else does that."

Mentally, riding also creates stimulation. Riders must process a lot of information, especially when playing a game while riding. Emotionally, horseback riding provides some characteristics of a high-risk activity that creates excitement for the rider, she says.

Horses are non-judgmental, Bozzo says.

The horses have to be well-behaved, well-trained, happy and sound to do this, she says, otherwise they will burn out.

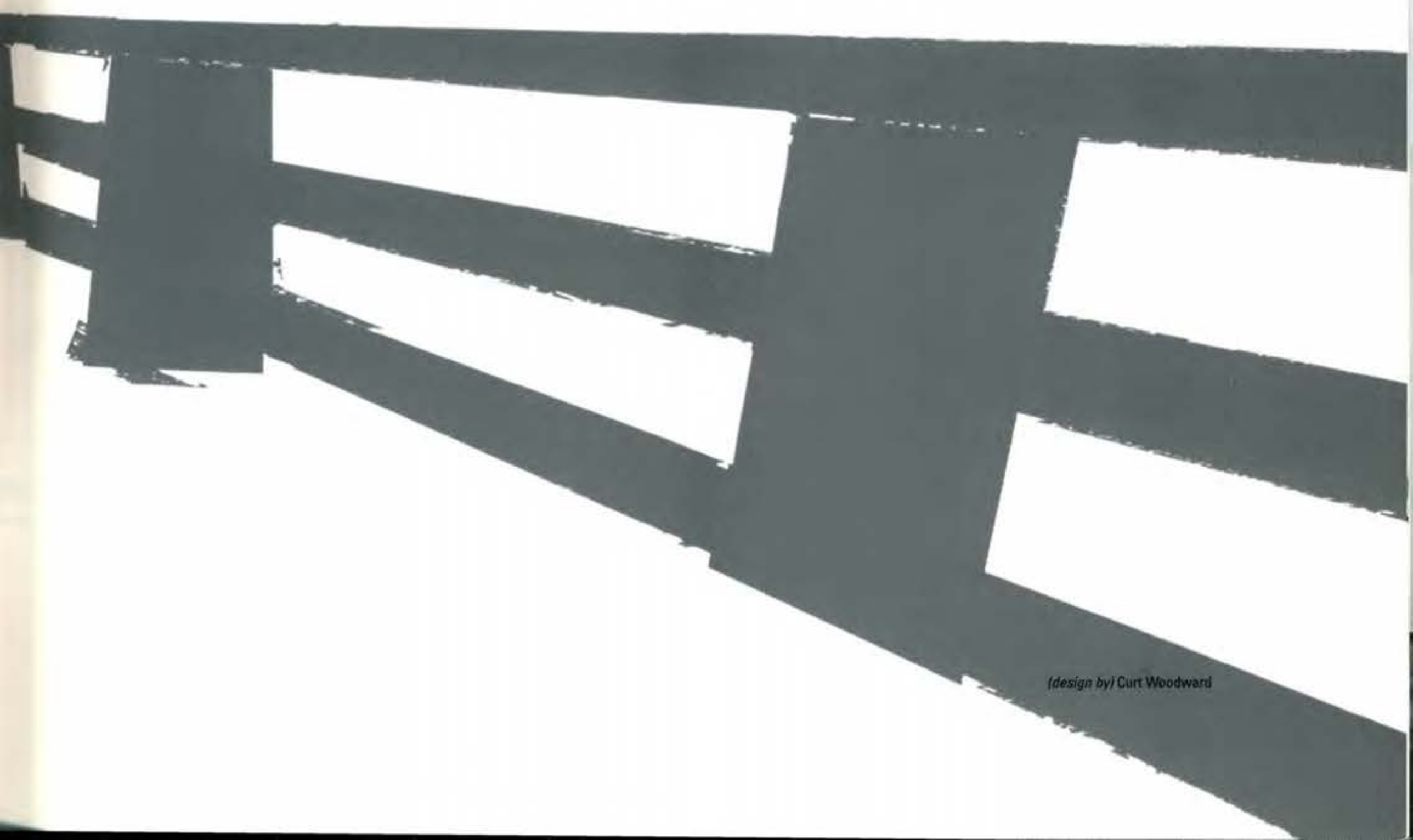
"You can't just stick them in a garage when you're done riding," she says. "They aren't motorcycles."

People don't realize how much work it takes to get these children on a horse for 25 minutes, Bozzo says. There must be insurance for both the riders and the volunteers, doctors' permission, paperwork, and of course, horse maintenance like training, maintaining the training, equipment and so on.

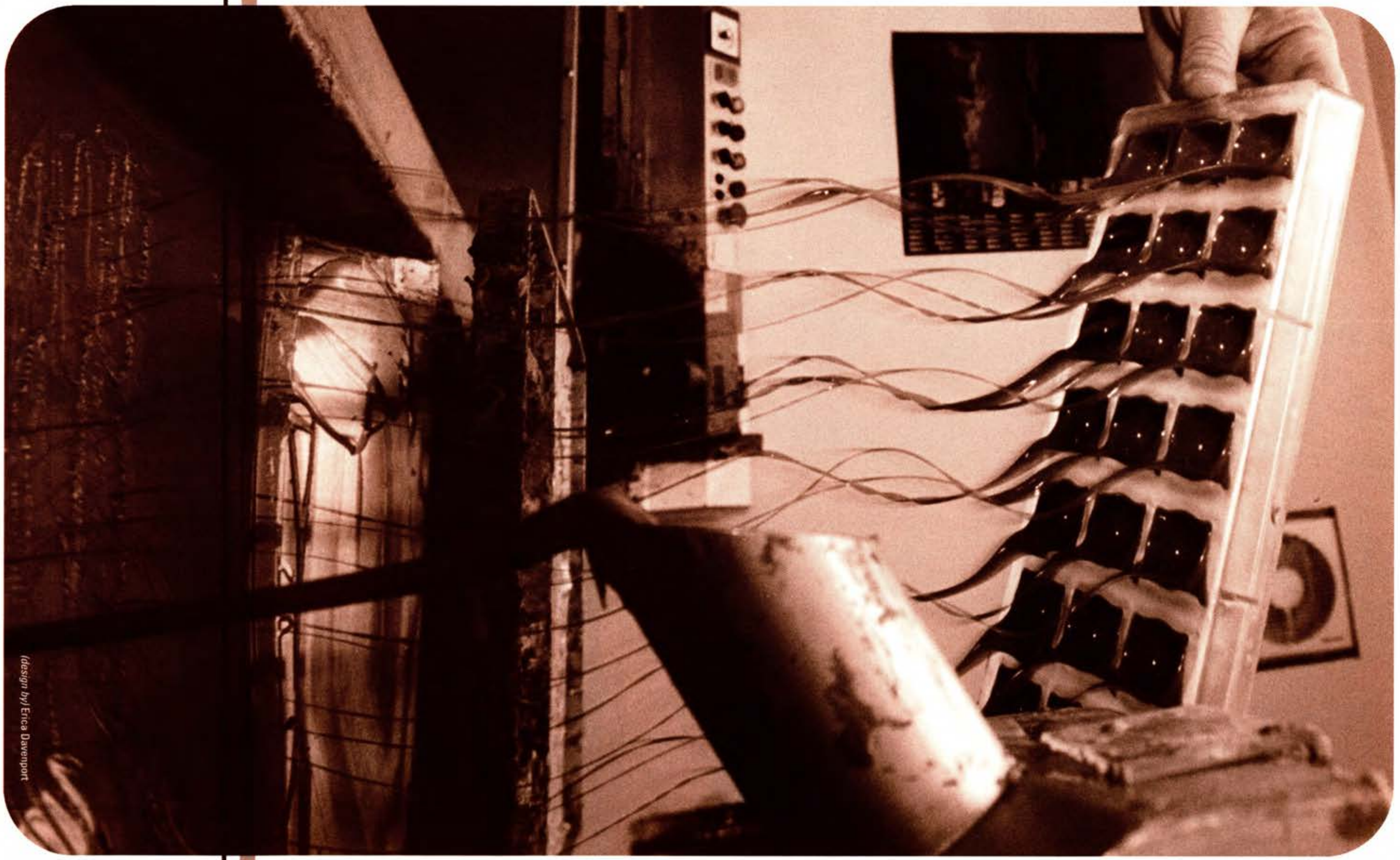
Bozzo charges $22 per lesson which covers about a third of the cost, she says. The rest comes from fundraising, the St. Luke's Foundation and other organizations and generous individuals.

"This is a lifestyle, not a job," Bozzo says as a new group of smiling children enter the arena.

Soon children's voices are ringing out, "Put your head in, put your head out, give your head a shake and pat your horse."



(design by) Curt Woodward



(design by) Erica Davenport

Whatcom's Willy Wonka

One whiff of it and the senses swoon, the mood lifts and smiles appear. Join **C. Nicki Krom** as she embarks on a dreamy journey to explore the decadence of a local chocolatier's passion. Photos by Chris Fuller.

Gliding across the kitchen floor, Kevin G. Buck, 46, snatches up bags and bars of chocolate, truffle liqueurs and one small handful of fresh truffles. The only way to learn how to appreciate chocolate is to try it all, Buck shouts as he continues his hurried but calculated movement.

"Here, we'll begin with the finished product and work our way back to the ingredients," Buck says, extending a truffle from the small chocolate smorgasbord he just created. In a moment of rest, he sits back on the stool expectedly, watching a patron's face as the truffle disappears.

No larger than a marble, the smooth mocha-colored sides form a tiny dome with an ivory lid and coffee bean accent. With one quick movement, the treasure falls from the hand to the mouth. In moments, the beautifully crafted truffle was melts on the tongue. The chocolate swirls inside the mouth like silk, filling the senses with nuances of cocoa, espresso and white chocolate. As the espresso truffle disappears, euphoria passes.

Buck, artist chocolatier and owner of Chocolate Necessities, smiles with satisfaction. "It's my favorite part of the day, introducing someone to what good chocolate really tastes like," Buck says. "I see their face light up and for a brief moment pure pleasure can be read on their face, from the way their eyes light up to the way their lips curl up in an effortless smile."

Chocolate Necessities is one of Bellingham's few candy shops. Off Horton Road where Meridian Street shrinks from four lanes to two, the small chocolate shop is tucked between tall ivory buildings that overshadow the old-fashioned screen door signaling the shop's entrance.

"The shop is somewhat out of the way, but once you know where it is and how good the chocolate is, it's just on the route," says Elizabeth Hamming, a Chocolate Necessities customer. "My family loves chocolate; we probably come here at least once a month. If you're going to eat chocolate, you might as well eat the best."

Chocolate Necessities is a garage-sized shop, with one truffle case and two parallel wood bookcases holding larger chocolate molds and gourmet teas.

The chocolates are enhanced by carefully chosen packaging, created and maintained by Buck's business partner Pamela Koehn. The foils and papers are imported from China and Switzerland. Every section is mapped out and planned; no detail is overlooked.

Every piece of chocolate in the shop is hand foiled and packaged, with signs strategically placed throughout the shelves and on the counters to gently remind the patrons that "warm hands melt chocolate."

"During Christmas and Valentines Day, hand packaging becomes particularly laborious," Koehn says. "There are days where I might have to hand foil hundreds to thousands of pieces of chocolate."

The truffle case, the shop's focal point, holds such flavors as Port Wine, Glac'ed Apricots, Cointreau, Australian Ginger, Frangelico and Three Star Brandy.

Each truffle's casing rises from the flat base in a near perfect arching motion to cover the center. Every piece is finished with an accent, as intricate as a white chocolate coffee bean to a simple drizzling of colored chocolate. All these protect the center, where a hint of taste begins and then explodes in the mouth. All the centers have a slightly different texture, from grainy and tough to smooth and diluted, yet all melt effortlessly in the heat of the mouth.

Behind every piece of chocolate is a chocolatier. Buck, who opened Chocolate Necessities in 1987, is driven by the desire to expose people to "good chocolate" by maintaining strict ingredient standards.

"I am determined to expose Americans to what good chocolate can taste like," Buck says. "My goal at Chocolate Necessities is to educate people about good chocolate and deliver only the best chocolate I can find."

Buck, a self-taught artist, perfected his craft largely through trial and error, attending only a one-week course on chocolate making at "Callebaut College," in Belgium. Buck attended Callebaut's five-story center for chocolate education in 1995. The course is free to chocolatiers who use the Callebaut chocolate, but has a two-year waiting period because they enroll only 10 students at a time.

"Although much of the Callebaut College experience was review, it was extensive," Buck says. "We learned everything from the importance of ingredients to how to make solid chocolate figures to the appropriate way to handle chocolate hygienically.

"The college offered a brief exposure to the different techniques that can be used when working with chocolate."

Through extensive chocolate taste-testing abroad and flavor experiments, Buck created his truffles.

Buck works in two primary media, Callebaut milk and dark chocolates. Callebaut, from the Belgium countryside, is the backbone of Buck's business.

"Without the right chocolate, nothing else matters," Buck says. "I decided on Callebaut chocolate after trying over 100 varieties; it's simply the best."

Buck regards Callebaut as such for two reasons - the cocoa butter content and the distinct nuances of the cocoa bean used to produce it. Both create a superior chocolate in both taste and eating experience.

Buck's truffles are scantily larger than a shooting marble, yet they pack an intense taste. The truffle shell consists of pure Callebaut chocolate in either dark or milk that begins melting as it touches the hand. The centers are made from truffle liqueurs imported from throughout the world. Buck's most recent truffle concoction calls for Tahitian vanilla; the one gallon bottle cost $225.

"In order to understand the delicate flavors of chocolate, you must start from the building blocks," Buck says. "You have to understand the differences between dark and milk chocolate before all else.

"Milk chocolate is more subtle in flavor with the majority of its taste coming from the type of powdered milk used in its mixture from skim milk to a rich crumb milk," he says. "Dark chocolate gets most of its taste from the pure cocoa bean.

"The beans can come from Africa to Hawaii, but each region has their own distinct taste," Buck says. "Costa Rica cocoa tastes earthy and rich, where a bean from Venezuela is fruity and light.

"Cocoa or chocolate is just like coffee or wine — there are different nuances," Buck says.

Buck supplies samples to illustrate his point. He serves five small pieces of different dark and milk chocolates, and continues.

"You can't learn language without opening your mouth," Buck says. "You can't learn chocolate without tasting it."

Each chocolate, despite having the same cocoa content, releases strangely different tastes. The dark chocolate from the Dominican Republic tastes earthy, almost as though bits of native soil were permanently embedded in the bean. The Cuban tastes darker. It melts slowly, filling the mouth with a thick, pleasant stream of chocolate.

"I just kept thinking we've been cheated and robbed ... Someone is playing a joke on the Americans; they're hiding all the good chocolate from us."

"I think true chocolate lovers prefer the strong tastes of dark chocolate," says Barry Dunn, a Chocolate Necessities customer.

Buck moves on to describe the content of the finished chocolate.

"Sugar and cocoa butter are the largest fluctuating ingredients in chocolate," Buck says. "The less cocoa butter there is, the drier the chocolate tastes and you don't get that instant melting sensation. If you have to bite into a chocolate to make it melt, there is a low cocoa butter content."

The best way to judge a chocolate's quality is simply to taste it, concentrating on the sensations in the mouth as the chocolate breaks down, Buck says.

"When tasting, taste for sugar and melting, the smoothness of the chocolate and how your mouth feels when the chocolate is gone," Buck says. "It takes time, first of all. You have to let the chocolate melt and then the tastes will emerge from the cocoa beans.

"An expertly crafted chocolate has a lot of complexity."

Buck selects a double chocolate truffle with Tahitian vanilla. As the protective chocolate shell slowly melts, tastes from the center begin to engulf the senses. The chocolate almost overpowers, leaving one wishing for milk, then the vanilla slowly begins to neutralize the chocolate. The once-powerful chocolate taste is replaced by the light vanilla overtures. In a few seconds the complex truffle has disappeared, once again offering satisfaction.

"Americans are used to tasting for sweetness, sugar, so we miss out on all the intricate flavors of cocoa beans," Buck says. "We don't have any sugar in here. It would be a crime to ruin good chocolate with sugar.

"Sugar is the enemy of chocolate. I personally like the flavors, textures and nuances possible with different ingredients such as an exotic tequila or Tahitian vanilla," Buck says. "All of those variables make chocolate a very rewarding and intriguing medium to work with."

Buck did not find his true chocolate calling until a trip to Canada left him feeling both intrigued and duped.

"I had traces of interest in chocolate as a teenager," Buck says. "My dad hid the Hershey bars on the top shelf of the kitchen cupboard. I had sneaking down to an art form.

"But it wasn't until a vacation in Canada that I tasted Callebaut chocolate," Buck says. "The chocolate was smooth and not too sweet," he said. "I was really irritated. I just kept thinking, we've been cheated and robbed in the United States. Someone is playing a joke on the Americans; they're hiding all the good chocolate from us.

"I thought it was unbelievable that I had never tasted chocolate like this," he says.

Buck, so impressed with the chocolate, bought a five-kilogram (11-pound) bar of the chocolate. He brought it over the border, claiming only the chocolate bar, and began experimenting. The "small chocolate bar" Buck claimed at the border was roughly the shape of letter size printing paper, and about four inches thick.

That original 11-pound bar prompted a business. Buck now orders more than 2,000 pounds of Callebaut chocolate every three months. He spends $5,000 to $6,000 every three months on chocolate. The chocolate then is passed on to customers with chocolate shapes beginning at 75 cents per piece and truffles beginning at $1.25.

After months of experimentation, he opened Chocolate Necessities. The shop was only open a couple hours per day in the beginning, because Buck continued to work as a custodian for the Ferndale School District. He worked both jobs for seven years as he waited to build up a customer base.

"I didn't want to borrow a bunch of money on an unjustifiable business plan," Buck says. "I was telling people what they wanted instead of asking them what I could provide. It was a backward way to approach a business.

"A lot of teachers got free samples over those seven years," Buck says. "They were good tasters and helped me to perfect my truffles."

In its first year, Chocolate Necessities made $130 in sales. Now, sales exceed $168,000.

"I had a lot of patience when it came to sales and customers. I knew it would be a slow process," Buck says.

Yet, with all his success in converting Bellingham chocolate enthusiasts, Buck remains unsatisfied.

"I want to get people to break away from the guilt of purchasing chocolate and allow themselves to enjoy it," Buck says.

Buck has a medium-build — 5'11" and 200 pounds — making it impossible to assume his profession by his stature. The only proof is a small tummy that over the years has acted as a chocolate safe. Years of chocolate tasting and creating have yet to really expand his figure, proving that chocolate doesn't have to be taboo.

"You can still be healthy and eat a truffle, or two, a day," Buck says. "The United States has a guilt culture when it comes to chocolate that Europeans don't have. In fact, most people don't know how good chocolate can be for you.

"Cocoa butter actually inhibits cavities, so you don't have to worry about ruining your teeth," Buck says. "And, good dark and milk chocolates have more antioxidants than most fruits and vegetables, including prunes, spinach and brussel sprouts."

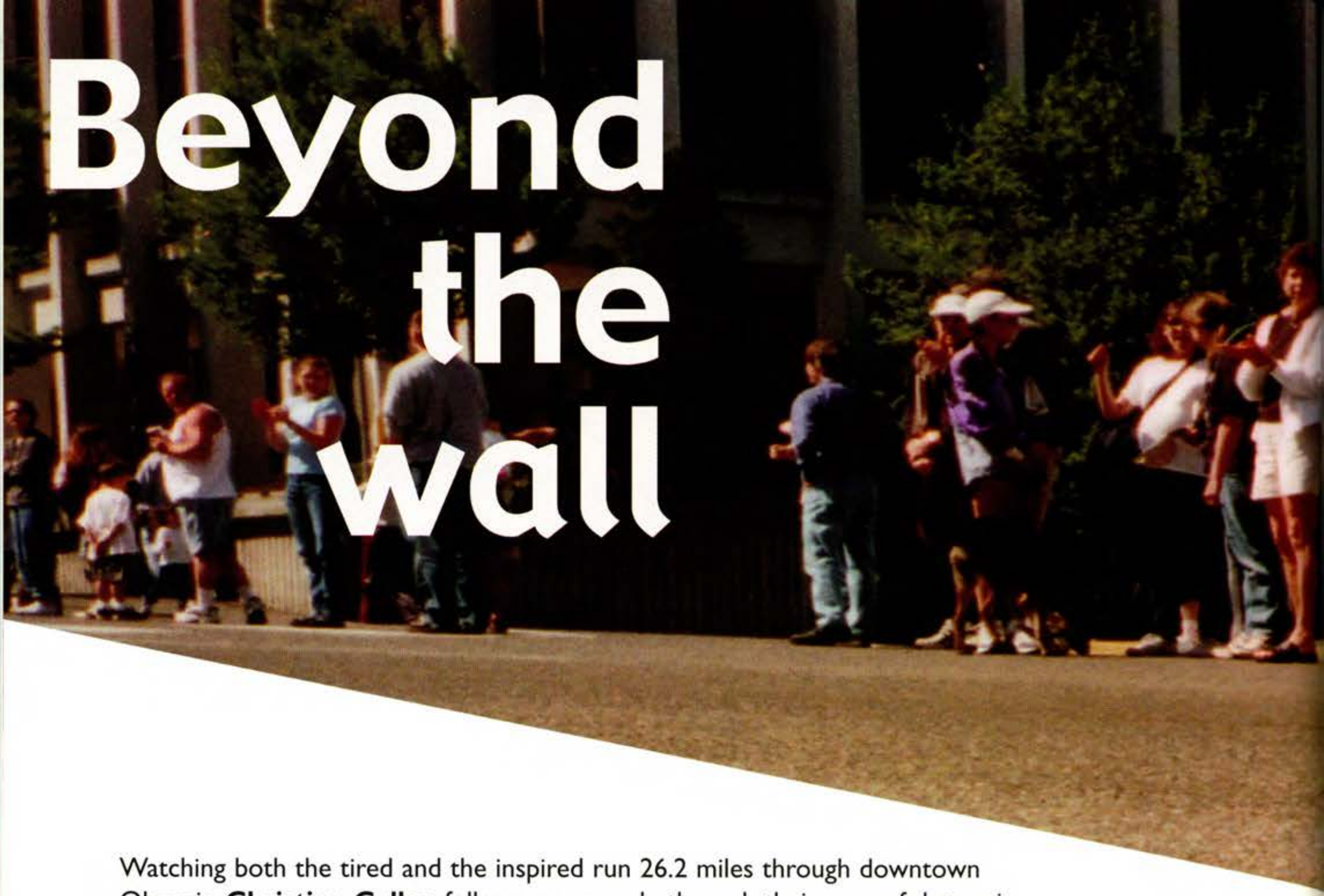
"These are absolutely wonderful chocolates," says Patricia McKeown, a Chocolate Necessities customer. "It's a wonderful flavor that just melts in your mouth. It is unusual, but fortunate for us to have such a quality chocolate shop in Whatcom County.

"There's no real way to do justice to the taste with words," McKeown says. "Besides, every time I come in, they give me another free sample."

Buck, determined to introduce people to good chocolate and rid Americans of their chocolate guilt, offers one more reason not to pass on a perfectly good truffle.

"Remember, there is no such thing as mad-cocoa disease," Buck says. "What other reason do you need to treat yourself to a piece of good chocolate?"

Beyond the wall



Watching both the tired and the inspired run 26.2 miles through downtown Olympia, **Christine Callan** follows one couple through their race of determination to reach the finish line.
Photos by Christine Callan.

As Michael Hartley, 31, approached the finish line his spirits lifted, but physically and mentally he struggled. He began to wonder if he could finish the approximately 44,000 steps it takes an average runner to finish a marathon. He heard them announce his name over the loud speaker welcoming him to the end of the race. Michael raised his arms up and smiled knowing the end was only seconds away.

He crossed the finish line and continued into the shoot. His legs begged for his attention as he began to lose footing, falling slightly to the side of the chute. Medical assistants hurried over. They put his arms over their shoulders and helped him to stand. He bent over with the medical staff at his side, trying to relieve his legs of the excruciating pain. He made it!

Michael and Andrea Hartley, like many endurance runners, wanted to put their bodies to the 26.2-mile test – running a marathon. They joined approximately 500 other adrenaline-craving runners on a Sunday in May for the 20th Annual Capitol City Marathon in Olympia. Several thousand people from all 50 states gathered at Sylvester Park in downtown Olympia. For a select few the race would last a little over two hours, but the rest would keep going for three, four and even five hours.

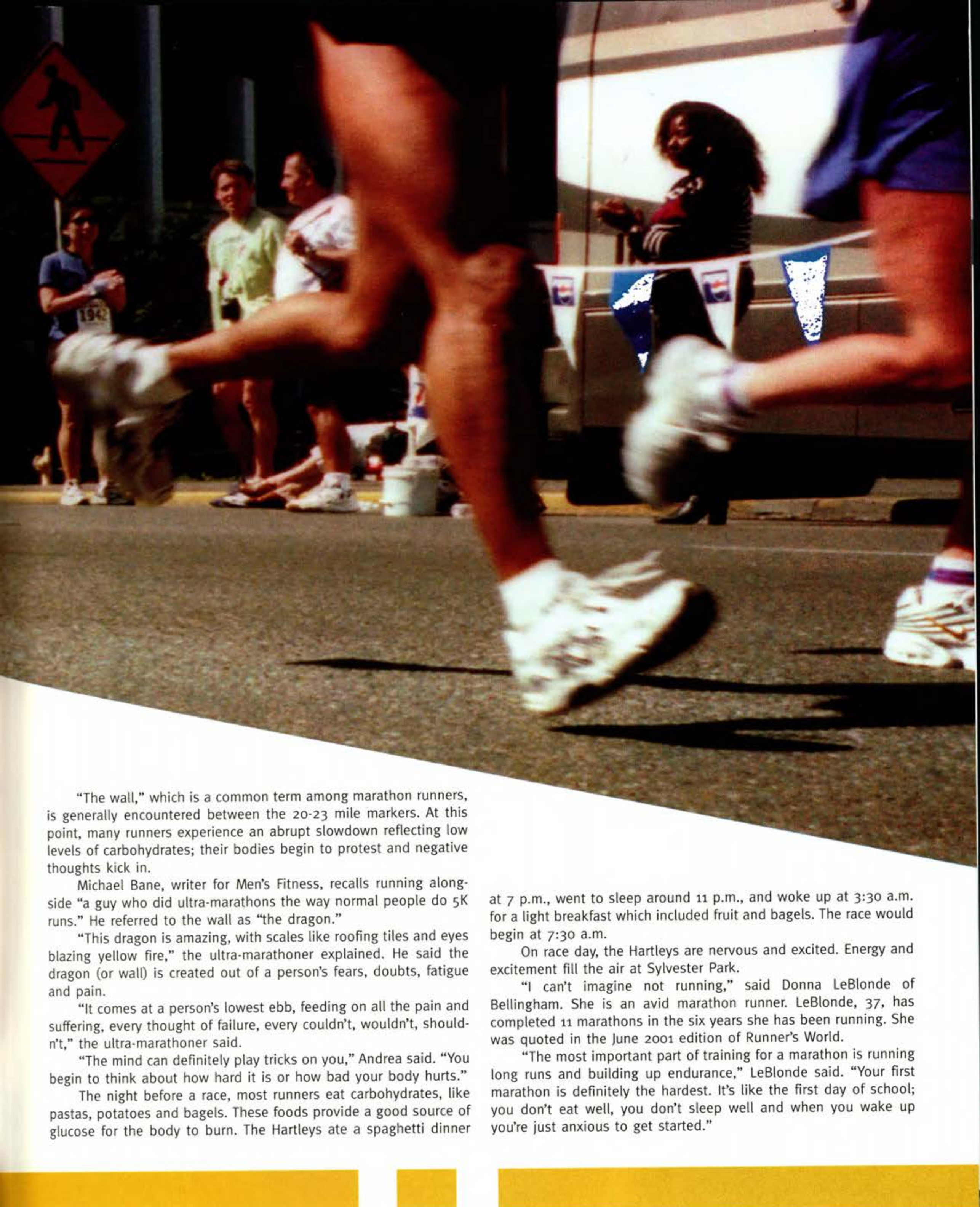
"I think I have a mental edge because I had a difficult pregnancy," said Andrea Hartley, 30. She and her husband Michael of Tacoma ran in the marathon together. It was their first marathon. They have run together since January when they joined a training group sponsored by South Sound running store in Olympia.

"My dad is a marathoner, so ever since I was 16, I have wanted to run a marathon," Andrea said. "I also wanted to get in shape after having her," she said pointing to her 11-month-old daughter, Jordan.

"She made me do it," Michael said. "That, plus I balloon up in weight when I'm not active. I've lost 50 pounds since last June."

They did several training runs on the actual racecourse, but on the race day they knew they would put their bodies to the ultimate challenge of completing the course in its entirety. The course, which was altered due to damage from the 6.8 magnitude earthquake in February, took them through various areas in downtown Olympia and onto the final stretch in front of the Washington State Capitol Building.

"We ran a 22-mile run during training and I felt good mentally," Andrea said. "It will be hard, but I don't think the wall will affect me."



"The wall," which is a common term among marathon runners, is generally encountered between the 20-23 mile markers. At this point, many runners experience an abrupt slowdown reflecting low levels of carbohydrates; their bodies begin to protest and negative thoughts kick in.

Michael Bane, writer for Men's Fitness, recalls running alongside "a guy who did ultra-marathons the way normal people do 5K runs." He referred to the wall as "the dragon."

"This dragon is amazing, with scales like roofing tiles and eyes blazing yellow fire," the ultra-marathoner explained. He said the dragon (or wall) is created out of a person's fears, doubts, fatigue and pain.

"It comes at a person's lowest ebb, feeding on all the pain and suffering, every thought of failure, every couldn't, wouldn't, shouldn't," the ultra-marathoner said.

"The mind can definitely play tricks on you," Andrea said. "You begin to think about how hard it is or how bad your body hurts."

The night before a race, most runners eat carbohydrates, like pastas, potatoes and bagels. These foods provide a good source of glucose for the body to burn. The Hartleys ate a spaghetti dinner at 7 p.m., went to sleep around 11 p.m., and woke up at 3:30 a.m. for a light breakfast which included fruit and bagels. The race would begin at 7:30 a.m.

On race day, the Hartleys are nervous and excited. Energy and excitement fill the air at Sylvester Park.

"I can't imagine not running," said Donna LeBlonde of Bellingham. She is an avid marathon runner. LeBlonde, 37, has completed 11 marathons in the six years she has been running. She was quoted in the June 2001 edition of Runner's World.

"The most important part of training for a marathon is running long runs and building up endurance," LeBlonde said. "Your first marathon is definitely the hardest. It's like the first day of school; you don't eat well, you don't sleep well and when you wake up you're just anxious to get started."

LeBlonde's first marathon was the 1997 Portland Marathon.

"It feels so good to push yourself to that absolute limit," she said. "It makes you realize what amazing things your body can do."

At Sylvester Park in downtown Olympia, the weather is perfect with the temperatures in the low 60s and no wind.

The runners look like a confused herd of animals, jumping up and down, and running in all different directions. Many adjust their clothing, which in most cases consists of spandex or tiny running shorts and a singlet (runner's tank).

The Hartleys meet up with family and friends around 7:15 a.m. and do a little stretching before heading over to the starting line. Voices grew louder as the start time draws nearer.

"I'll just be glad when this is over," Michael says as he and Andrea find their place among the several hundred other marathon runners. Tension fills the air as a hush comes over the crowd for the count down.

"Twenty-five seconds people," the announcer says. Spectators stand with their cameras focused and poised.

The announcer asks the spectators to stay to the side because in less than ten seconds, the race will begin. Several runners begin to hoot and holler. Others look as though they have just set foot in a funeral home with their expressionless faces and focused attention.

"Five-four-three-two-one-bang!" They're off like prisoners set free, kids on Christmas morning, athletes who want to push their bodies to the limit.

It is crucial that the Hartleys keep themselves well hydrated and their intake of carbohydrates high during the race.

According to Marshall Burt of the Elite Training Group track club in Austin, Texas, runners may need to consume 200-300 grams of carbohydrates (glucose) during the race. Consumption should begin early or the glucose won't make it into the bloodstream and head toward the brain/nervous system, which tells the body what to do.

The American College of Sports Medicine recommends drinking five to 12 ounces of fluids (approximately one and a half glasses) every 15 to 20 minutes during a marathon. This is a lot of water to consume, so it is recommended that runners practice during long runs in training.

"Just as you can train your body to run longer distances, you can teach it to absorb more fluid (and therefore perform better) by gradually increasing the amount you consume during training," said Nancy Clark, M.S., R.D., author of "Nancy Clark's Sports Nutrition Guidebook."

At mile 10, Michael feels strong and well nourished. Several minutes ahead of his wife, he chats with others around him, poses for a picture and runs over a bridge that will lead him to the final sixteen miles.

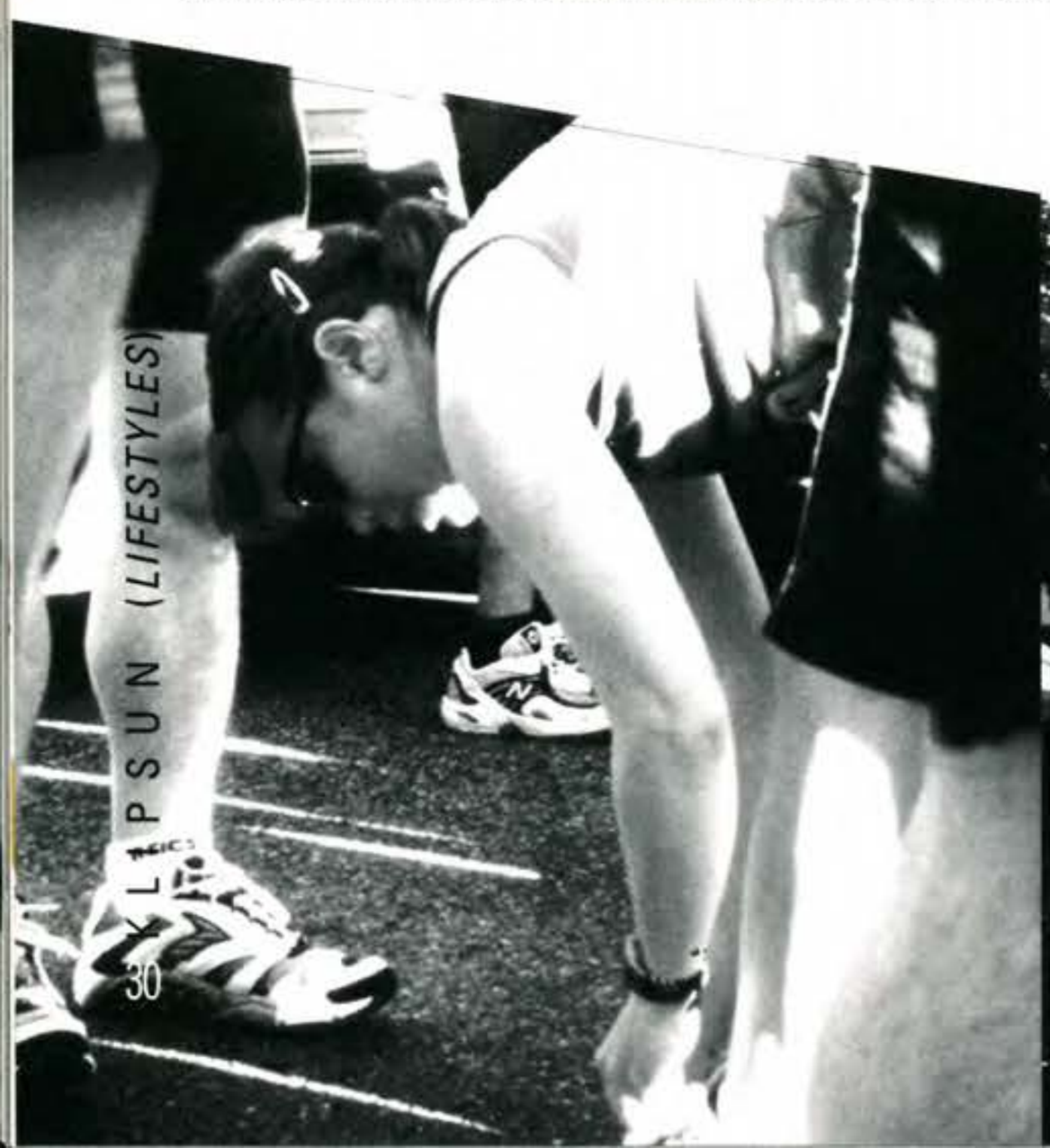
"Where's the restroom?" "Do you really think she is cheating on you?" and "Where might one find those (shoe) insert things?" are conversations between runners overheard by spectators.

Andrea finds a smooth rhythm. As she moves into the latter miles, the long hours of training begin to pay off. Her legs are ready to keep battling.

"Your muscles have memory and they get used to doing things," LeBlonde said. "It's a process of breaking them down so that your body can build the muscles back up again."

"I'm feeling good," Andrea says steadily approaching mile 11. She eats an energy gel every six miles along the way and gets one cup of water and one cup of All-Sport at each water station located at every mile.

According to Burt, muscles can use fat as a fuel source; however, the brain and nervous system can only use glucose. If a person starts to run low on glucose, the mind's perception of how hard the body is working will increase, even though the running pace remains the same or slower.



(design by) Curt Woodward

At mile 19, Michael feels different pains than he had felt in training. In training sessions, his quads were the first things to nag him, but this time his feet feel as though they are giving out. Although he fights with his thoughts, he is encouraged at how good his body feels as he passes others who are fading.

"It was a lot of motivation for me seeing an ultra-marathoner hit the wall," Michael said.

He cruises through some of the toughest miles of the race without any complication – until the very end.

At the last mile, Michael said he began to stagger.

Trying to keep his mind off of the pain in his feet and his knees, he listens as people encourage him on. The road curves slightly downhill as he and several others approach the final stretch.

He keeps reminding himself he can do it. As the finish line comes into view, his face shows a surge of joy and pride.

Drawing close to the end, he hears the announcer call his name and welcome him to the finish line. He crosses the finish line at three hours and forty-four minutes.

"I barely made it through the chute," he says. "I thought I was going to have to go to the medical center."

After he feels he can walk on his own, he stretches his legs out and finds himself a place along the side of the finish line to stand and wait for Andrea.

Struggling to keep her focus at mile 21, Andrea also tries to keep her thoughts positive.

"I had to keep talking to myself," she said. "I was thinking 'Oh gosh can I keep going?' You just want to stop."

She continues, reminding herself that the last part of the race is downhill. She won't let herself stop, knowing if she does, the race would be over.

Andrea finally turns onto the last stretch.

"As soon as I saw the finish line I was okay," Andrea said.

Michael spots his wife and begins jumping up and down. He runs over, grabs his daughter Jordan from the arms of a friend, and begins cheering. Andrea crosses the finish line at four hours and twenty-five minutes.

With Jordan in his arms, Michael runs to the end of the chute and gives his wife a big hug. Tears roll down Andrea's face as she spots her family.

"I lost it when I saw Jordan," Andrea says. Her mother-in-law takes Jordan from Michael. The couple embraces one another, smiling and kissing as they celebrate their accomplishment together.

"She had this baby less than a year ago," Andrea's mother-in-law says, talking to some family friends. "And Michael said he was going to lose as many pounds as Andrea gained when she was pregnant."

"Which I did and then some," Michael volunteers.

"She is our inspiration," Andrea says, kissing her daughter on the cheek.

"She really is," Michael agrees.

Michael and Andrea head toward the concession area. They pick up a couple of bagels and some Gatorade before finding a place to rest in the shade. They talk with friends and family who are curious to know what it's like to run 26.2 miles.

Andrea is a little achy and her stomach feels uneasy, but overall she feels better than she thought she would.

"I am thanking God right now," Andrea says. "What a rush!"

Michael is just glad to be finished.

"My knees are sore," he says. "But my spirits are high."

- competitive stride
- biohazardous breakdown

klipsun.www.edu/experience.html